

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: P276596

Luminaire Tested: **24CZ2-50-S-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276596  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-50-S-UNV-L82765-W2A1-U-6500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5196.6 lumens  
Efficiency: N/A  
Efficacy: 125.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

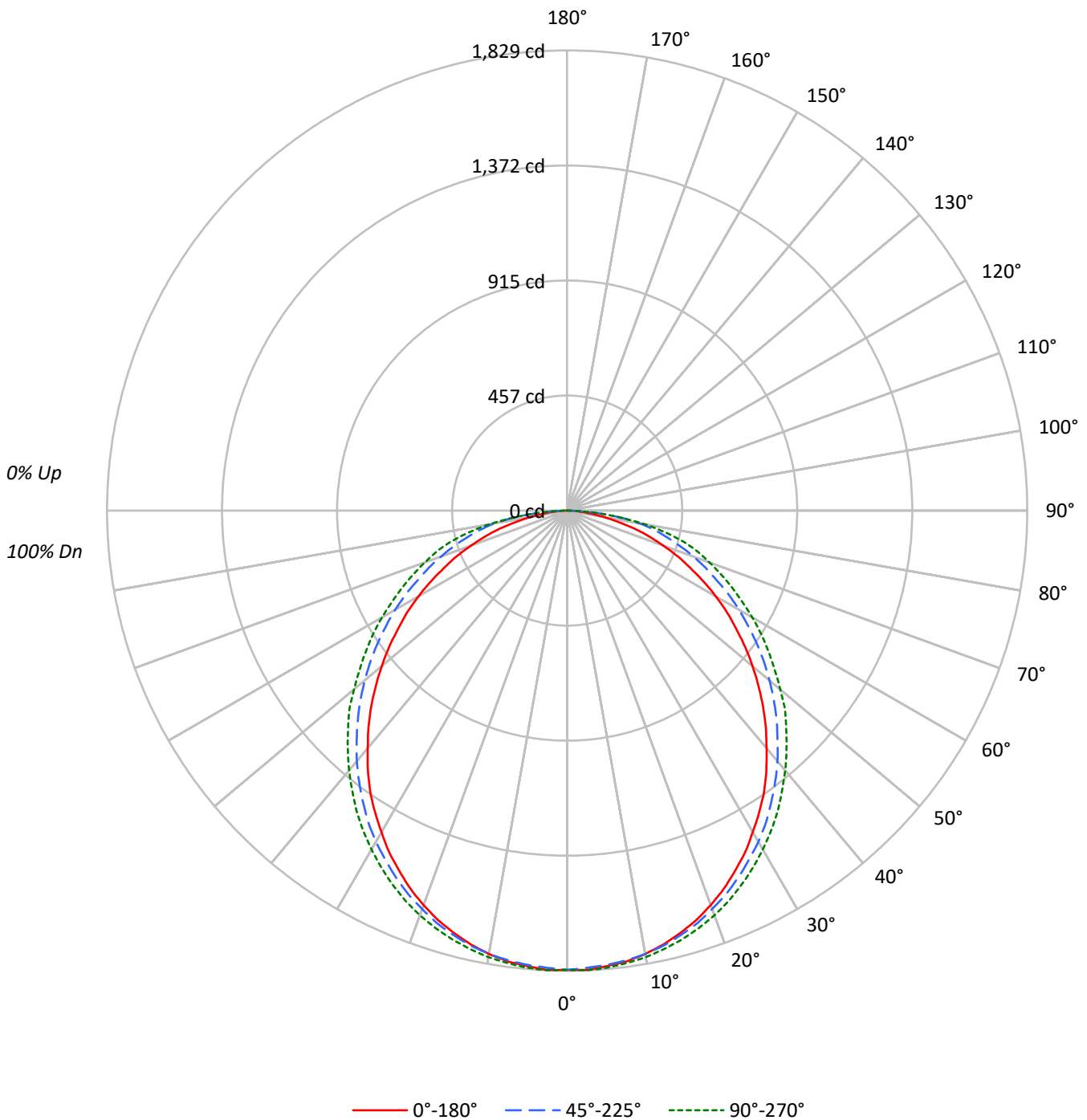
Input Watts (W): 41.478  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	96	88	81	76	84	79	74	81	76	72	78	74	71	69					69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42					42			
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

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

	0°	45°	90°
0°	2456	2456	2456
5°	2454	2448	2463
10°	2445	2445	2463
15°	2421	2433	2458
20°	2389	2413	2451
25°	2345	2389	2436
30°	2293	2362	2416
35°	2242	2324	2397
40°	2166	2285	2369
45°	2095	2239	2343
50°	2014	2197	2315
55°	1924	2157	2292
60°	1834	2123	2288
65°	1719	2086	2302
70°	1591	2098	2364
75°	1424	2137	2497
80°	1151	2264	2443
85°	866	1987	1936



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	172.8	3.3
10°-20°	493.8	9.5
20°-30°	742.4	14.3
30°-40°	884.3	17.0
40°-50°	905.0	17.4
50°-60°	814.8	15.7
60°-70°	639.8	12.3
70°-80°	415.3	8.0
80°-90°	128.4	2.5
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°	1409.0	27.1
0°-40°	2293.3	44.1
0°-60°	4013.1	77.2
0°-90°	5196.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5196.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1826	1826	1826	1826	1826	
5°	1817	1821	1812	1822	1824	173
15°	1738	1743	1746	1761	1764	490
25°	1580	1593	1609	1636	1641	728
35°	1365	1382	1415	1449	1459	852
45°	1101	1127	1177	1222	1231	849
55°	820	857	919	967	977	735
65°	540	581	655	710	723	537
75°	274	327	411	467	480	290
85°	56	104	129	125	125	68
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1825.6	1825.6	1825.6	1825.6	1825.6
2.5°	1827.3	1827.3	1819.0	1827.3	1828.9
5°	1817.3	1820.6	1812.4	1822.3	1823.9
7.5°	1807.4	1807.4	1802.5	1812.4	1814.0
10°	1789.3	1790.9	1789.3	1800.8	1802.5
12.5°	1766.2	1769.5	1771.1	1782.7	1784.3
15°	1738.1	1743.1	1746.4	1761.2	1764.5
17.5°	1706.8	1711.7	1720.0	1736.5	1739.8
20°	1668.8	1675.4	1685.3	1706.8	1711.7
22.5°	1627.5	1634.1	1650.6	1670.4	1678.7
25°	1579.7	1592.9	1609.4	1635.8	1640.7
27.5°	1531.8	1543.3	1564.8	1592.9	1599.5
30°	1475.7	1493.8	1520.2	1548.3	1554.9
32.5°	1421.2	1439.4	1470.7	1500.4	1508.7
35°	1365.1	1381.6	1414.6	1449.3	1459.2
37.5°	1300.7	1322.2	1358.5	1393.1	1403.0
40°	1233.0	1259.4	1300.7	1337.0	1348.6
42.5°	1168.6	1196.7	1238.0	1277.6	1290.8
45°	1101.0	1127.4	1176.9	1221.5	1231.4
47.5°	1031.6	1061.4	1114.2	1158.7	1175.3
50°	962.3	993.7	1049.8	1096.0	1105.9
52.5°	893.0	926.0	985.4	1034.9	1039.9
55°	820.4	856.7	919.4	967.3	977.2
57.5°	754.3	785.7	853.4	902.9	914.5
60°	681.7	716.4	789.0	835.2	850.1
62.5°	612.4	648.7	724.6	770.8	784.1
65°	539.8	581.0	655.3	709.8	723.0
67.5°	477.0	516.6	595.9	648.7	661.9
70°	404.4	449.0	533.2	587.6	600.8
72.5°	341.7	387.9	472.1	524.9	544.7
75°	274.0	326.8	411.0	467.1	480.3
77.5°	208.0	269.1	354.9	397.8	397.8
80°	148.6	212.9	292.2	312.0	315.3
82.5°	97.4	160.1	216.2	214.6	214.6
85°	56.1	104.0	128.7	125.4	125.4
87.5°	21.5	42.9	46.2	46.2	44.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)