

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: P276595

Luminaire Tested: **24CZ2-50-S-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276595
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-5700K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5183.7 lumens
Efficiency: N/A
Efficacy: 127.0 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

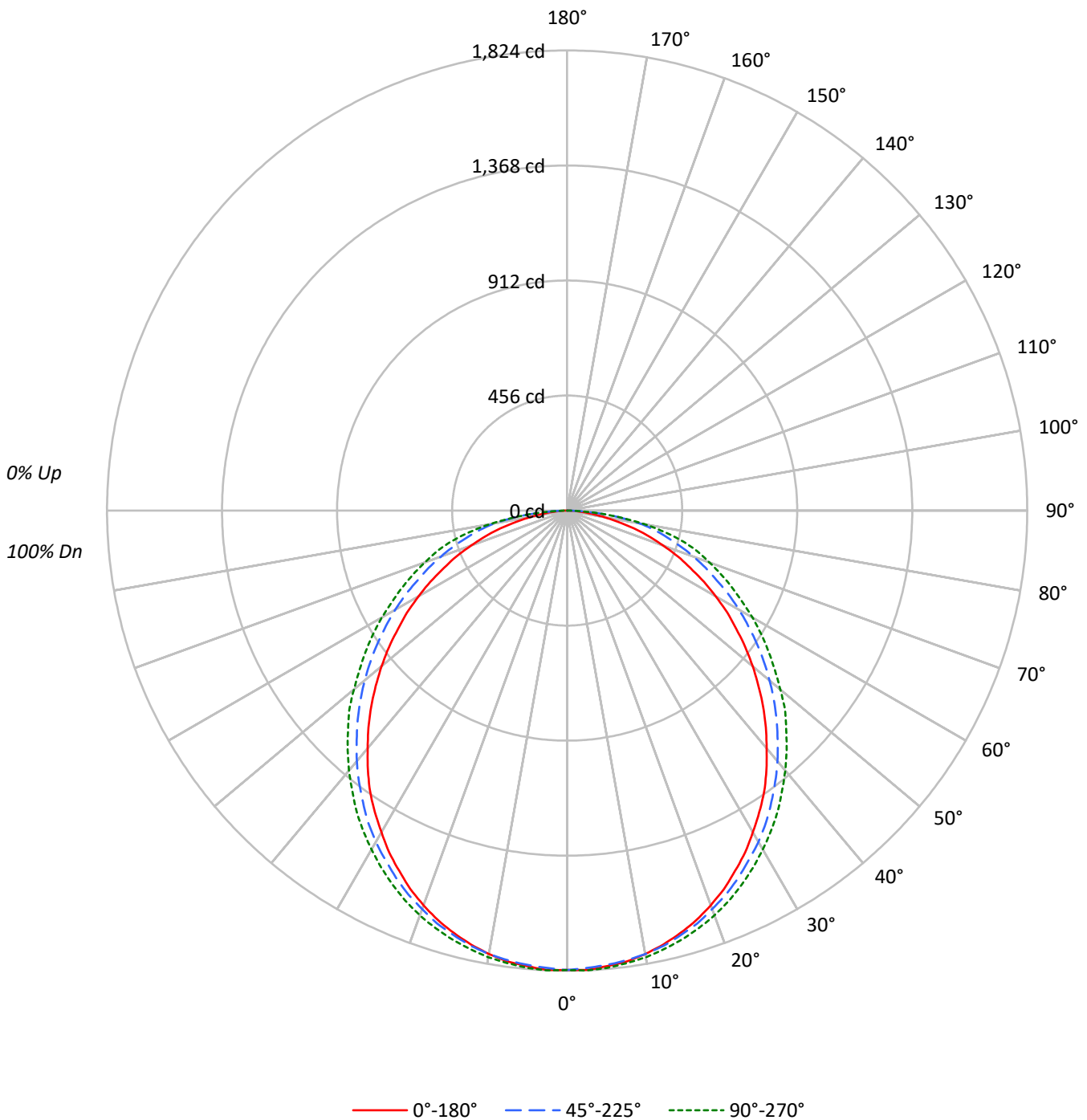
Input Watts (W): 40.827
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2450	2450	2450
5°	2448	2442	2457
10°	2438	2438	2457
15°	2415	2427	2452
20°	2383	2407	2445
25°	2339	2383	2430
30°	2287	2356	2410
35°	2237	2318	2391
40°	2160	2279	2363
45°	2090	2234	2337
50°	2009	2192	2309
55°	1920	2151	2286
60°	1830	2118	2282
65°	1714	2081	2296
70°	1587	2092	2358
75°	1421	2131	2491
80°	1148	2258	2437
85°	865	1982	1931



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.4	3.3
10°-20°	492.6	9.5
20°-30°	740.5	14.3
30°-40°	882.1	17.0
40°-50°	902.7	17.4
50°-60°	812.7	15.7
60°-70°	638.3	12.3
70°-80°	414.2	8.0
80°-90°	128.1	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°	1405.5	27.1
0°-40°	2287.6	44.1
0°-60°	4003.1	77.2
0°-90°	5183.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5183.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1821	1821	1821	1821	1821	
5°	1813	1816	1808	1818	1819	172
15°	1734	1739	1742	1757	1760	489
25°	1576	1589	1605	1632	1637	726
35°	1362	1378	1411	1446	1456	849
45°	1098	1125	1174	1218	1228	847
55°	818	854	917	965	975	734
65°	538	580	654	708	721	536
75°	273	326	410	466	479	289
85°	56	104	128	125	125	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1821.1	1821.1	1821.1	1821.1	1821.1
2.5°	1822.7	1822.7	1814.5	1822.7	1824.4
5°	1812.8	1816.1	1807.9	1817.8	1819.4
7.5°	1802.9	1802.9	1798.0	1807.9	1809.5
10°	1784.8	1786.5	1784.8	1796.4	1798.0
12.5°	1761.8	1765.1	1766.7	1778.3	1779.9
15°	1733.8	1738.7	1742.0	1756.8	1760.1
17.5°	1702.5	1707.5	1715.7	1732.1	1735.4
20°	1664.6	1671.2	1681.1	1702.5	1707.5
22.5°	1623.5	1630.1	1646.5	1666.3	1674.5
25°	1575.7	1588.9	1605.4	1631.7	1636.6
27.5°	1528.0	1539.5	1560.9	1588.9	1595.5
30°	1472.0	1490.1	1516.5	1544.4	1551.0
32.5°	1417.7	1435.8	1467.1	1496.7	1504.9
35°	1361.7	1378.1	1411.1	1445.7	1455.5
37.5°	1297.5	1318.9	1355.1	1389.7	1399.5
40°	1230.0	1256.3	1297.5	1333.7	1345.2
42.5°	1165.7	1193.7	1234.9	1274.4	1287.6
45°	1098.2	1124.6	1174.0	1218.4	1228.3
47.5°	1029.1	1058.7	1111.4	1155.9	1172.3
50°	959.9	991.2	1047.2	1093.3	1103.2
52.5°	890.8	923.7	983.0	1032.4	1037.3
55°	818.3	854.5	917.1	964.9	974.7
57.5°	752.5	783.7	851.3	900.7	912.2
60°	680.0	714.6	787.0	833.1	848.0
62.5°	610.9	647.1	722.8	768.9	782.1
65°	538.4	579.6	653.7	708.0	721.2
67.5°	475.8	515.4	594.4	647.1	660.3
70°	403.4	447.9	531.8	586.2	599.3
72.5°	340.8	386.9	470.9	523.6	543.4
75°	273.3	326.0	410.0	466.0	479.1
77.5°	207.5	268.4	354.0	396.8	396.8
80°	148.2	212.4	291.4	311.2	314.5
82.5°	97.1	159.7	215.7	214.0	214.0
85°	56.0	103.7	128.4	125.1	125.1
87.5°	21.4	42.8	46.1	46.1	44.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)