

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: P276593

Luminaire Tested: **24CZ2-50-S-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276593
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-5000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5119.1 lumens
Efficiency: N/A
Efficacy: 126.0 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

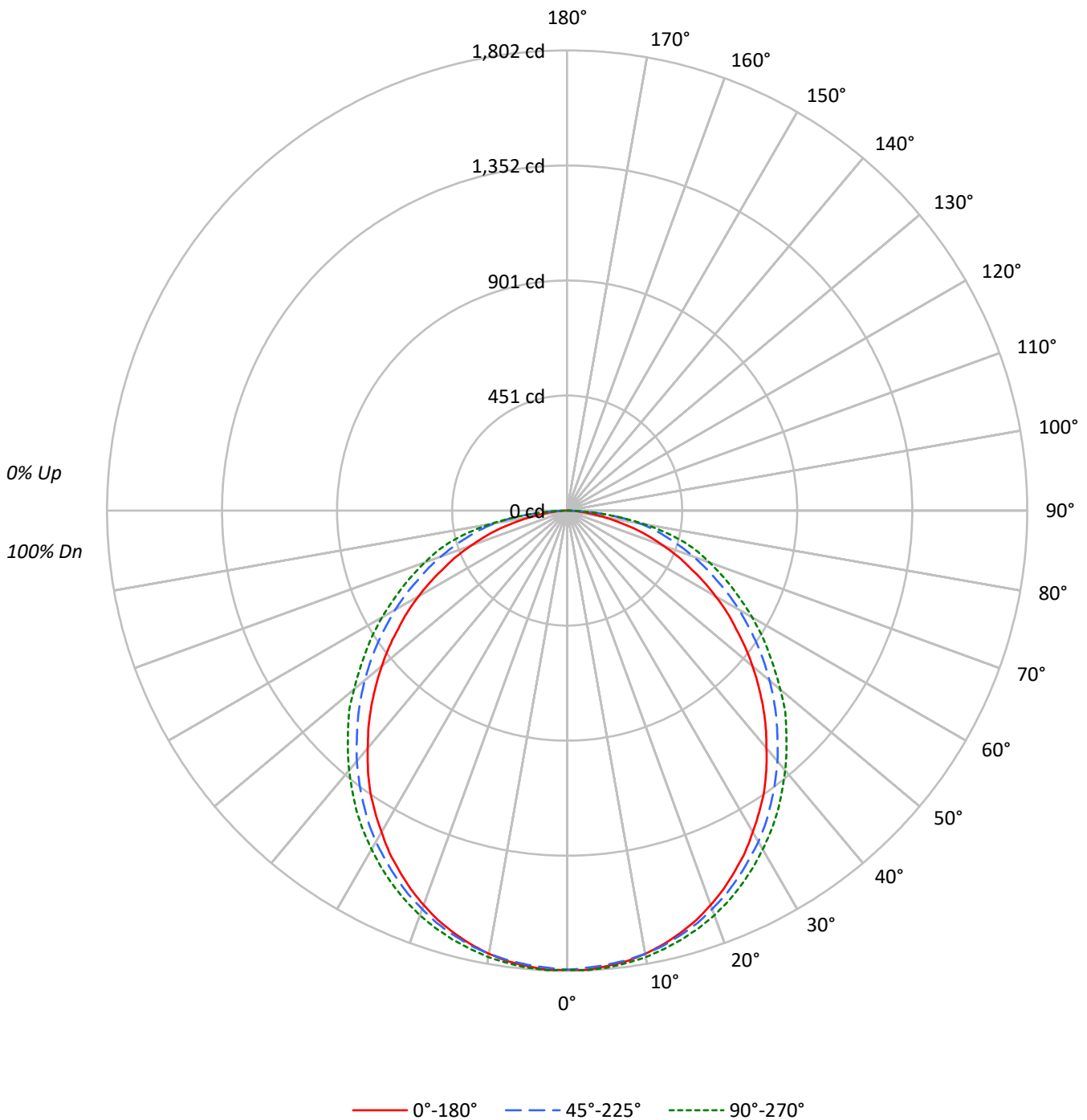
Input Watts (W): 40.641
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2420	2420	2420
5°	2418	2411	2427
10°	2408	2408	2426
15°	2385	2396	2421
20°	2354	2377	2414
25°	2310	2354	2400
30°	2258	2327	2380
35°	2209	2289	2361
40°	2133	2250	2333
45°	2064	2206	2308
50°	1984	2165	2280
55°	1896	2125	2258
60°	1807	2091	2253
65°	1693	2055	2267
70°	1567	2066	2329
75°	1403	2105	2460
80°	1134	2230	2407
85°	854	1958	1908



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.3	3.3
10°-20°	486.5	9.5
20°-30°	731.3	14.3
30°-40°	871.1	17.0
40°-50°	891.5	17.4
50°-60°	802.6	15.7
60°-70°	630.3	12.3
70°-80°	409.1	8.0
80°-90°	126.5	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°	1388.0	27.1
0°-40°	2259.1	44.1
0°-60°	3953.2	77.2
0°-90°	5119.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5119.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1798	1798	1798	1798	1798	
5°	1790	1794	1785	1795	1797	170
15°	1712	1717	1720	1735	1738	483
25°	1556	1569	1585	1611	1616	717
35°	1345	1361	1394	1428	1437	839
45°	1084	1111	1159	1203	1213	836
55°	808	844	906	953	963	724
65°	532	572	646	699	712	529
75°	270	322	405	460	473	286
85°	55	102	127	124	124	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1798.4	1798.4	1798.4	1798.4	1798.4
2.5°	1800.0	1800.0	1791.9	1800.0	1801.6
5°	1790.2	1793.5	1785.4	1795.1	1796.7
7.5°	1780.5	1780.5	1775.6	1785.4	1787.0
10°	1762.6	1764.2	1762.6	1774.0	1775.6
12.5°	1739.8	1743.1	1744.7	1756.1	1757.7
15°	1712.2	1717.1	1720.3	1734.9	1738.2
17.5°	1681.3	1686.2	1694.3	1710.6	1713.8
20°	1643.9	1650.4	1660.2	1681.3	1686.2
22.5°	1603.2	1609.7	1626.0	1645.5	1653.6
25°	1556.1	1569.1	1585.4	1611.4	1616.3
27.5°	1508.9	1520.3	1541.5	1569.1	1575.6
30°	1453.6	1471.5	1497.6	1525.2	1531.7
32.5°	1400.0	1417.9	1448.8	1478.0	1486.2
35°	1344.7	1361.0	1393.5	1427.6	1437.4
37.5°	1281.3	1302.4	1338.2	1372.3	1382.1
40°	1214.6	1240.6	1281.3	1317.1	1328.4
42.5°	1151.2	1178.9	1219.5	1258.5	1271.5
45°	1084.5	1110.6	1159.3	1203.2	1213.0
47.5°	1016.3	1045.5	1097.6	1141.5	1157.7
50°	948.0	978.9	1034.1	1079.7	1089.4
52.5°	879.7	912.2	970.7	1019.5	1024.4
55°	808.1	843.9	905.7	952.8	962.6
57.5°	743.1	774.0	840.6	889.4	900.8
60°	671.5	705.7	777.2	822.8	837.4
62.5°	603.2	639.0	713.8	759.3	772.4
65°	531.7	572.4	645.5	699.2	712.2
67.5°	469.9	508.9	587.0	639.0	652.0
70°	398.4	442.3	525.2	578.9	591.9
72.5°	336.6	382.1	465.0	517.1	536.6
75°	269.9	321.9	404.9	460.2	473.2
77.5°	204.9	265.0	349.6	391.9	391.9
80°	146.3	209.8	287.8	307.3	310.6
82.5°	95.9	157.7	213.0	211.4	211.4
85°	55.3	102.4	126.8	123.6	123.6
87.5°	21.1	42.3	45.5	45.5	43.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)