

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: P276382

Luminaire Tested: **24CZ2-50-S-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276382
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-L83050-W2A1-U-3000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4699.0 lumens
Efficiency: N/A
Efficacy: 118.6 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

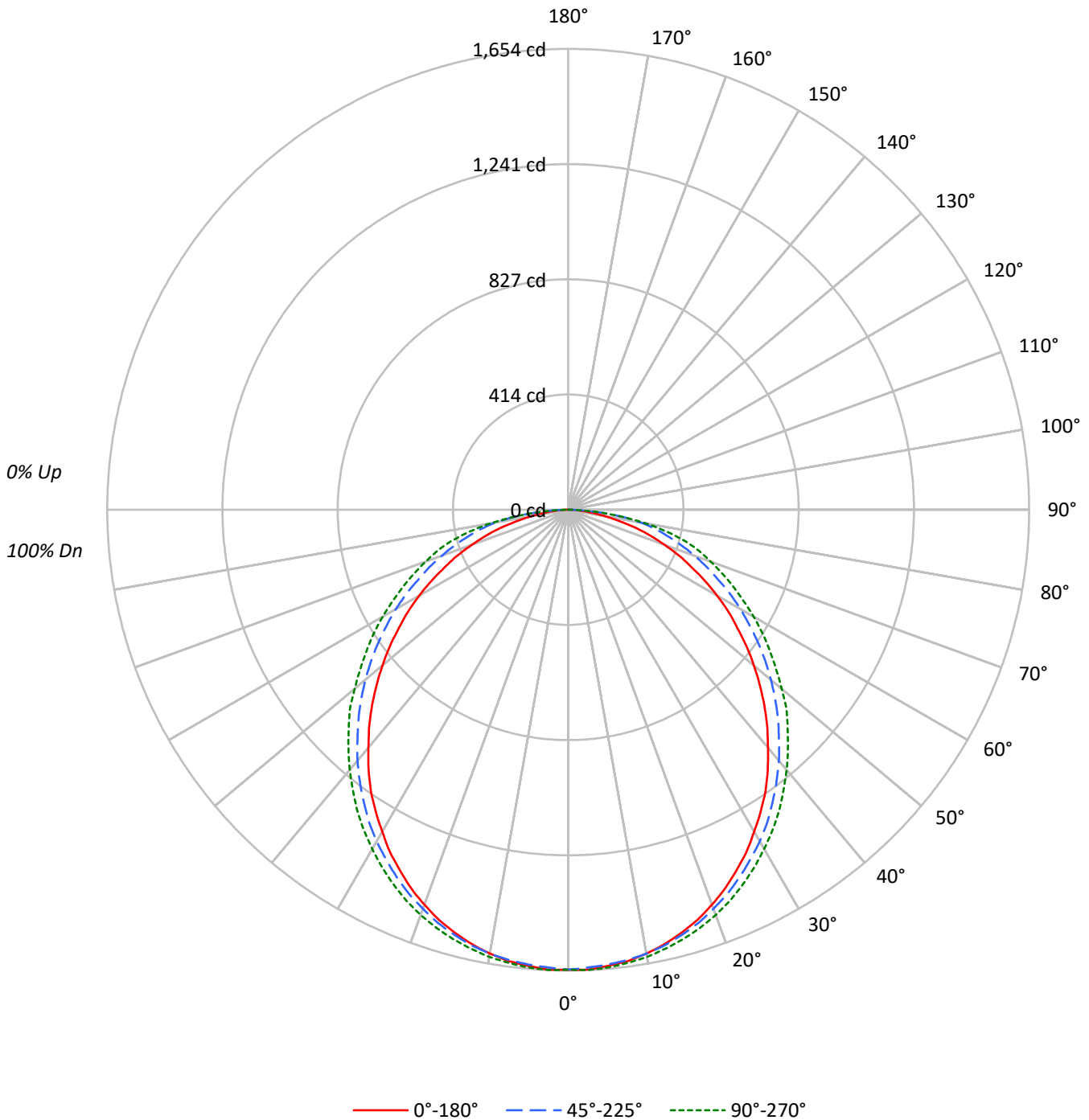
Input Watts (W): 39.631578
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2221	2221	2221
5°	2219	2213	2228
10°	2211	2211	2227
15°	2189	2200	2223
20°	2161	2182	2216
25°	2121	2161	2203
30°	2073	2136	2184
35°	2028	2101	2167
40°	1958	2066	2142
45°	1894	2025	2119
50°	1822	1987	2093
55°	1740	1950	2073
60°	1659	1920	2069
65°	1554	1887	2081
70°	1439	1897	2137
75°	1288	1932	2258
80°	1041	2047	2209
85°	783	1797	1751



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.3	3.3
10°-20°	446.6	9.5
20°-30°	671.3	14.3
30°-40°	799.6	17.0
40°-50°	818.3	17.4
50°-60°	736.7	15.7
60°-70°	578.6	12.3
70°-80°	375.5	8.0
80°-90°	116.1	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°	1274.1	27.1
0°-40°	2073.7	44.1
0°-60°	3628.8	77.2
0°-90°	4699.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4699.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1651	1651	1651	1651	1651	
5°	1643	1646	1639	1648	1649	156
15°	1572	1576	1579	1593	1596	443
25°	1428	1440	1455	1479	1484	658
35°	1234	1249	1279	1310	1319	770
45°	996	1019	1064	1104	1114	768
55°	742	775	831	875	884	665
65°	488	525	593	642	654	486
75°	248	296	372	422	434	262
85°	51	94	116	113	113	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1650.8	1650.8	1650.8	1650.8	1650.8
2.5°	1652.3	1652.3	1644.8	1652.3	1653.8
5°	1643.3	1646.3	1638.8	1647.8	1649.3
7.5°	1634.4	1634.4	1629.9	1638.8	1640.3
10°	1618.0	1619.4	1618.0	1628.4	1629.9
12.5°	1597.1	1600.0	1601.5	1612.0	1613.5
15°	1571.7	1576.2	1579.1	1592.6	1595.6
17.5°	1543.3	1547.8	1555.3	1570.2	1573.2
20°	1509.0	1515.0	1523.9	1543.3	1547.8
22.5°	1471.7	1477.7	1492.6	1510.5	1518.0
25°	1428.4	1440.3	1455.3	1479.1	1483.6
27.5°	1385.1	1395.6	1415.0	1440.3	1446.3
30°	1334.4	1350.8	1374.7	1400.0	1406.0
32.5°	1285.1	1301.5	1329.9	1356.8	1364.2
35°	1234.4	1249.3	1279.1	1310.5	1319.4
37.5°	1176.2	1195.6	1228.4	1259.7	1268.7
40°	1115.0	1138.8	1176.2	1209.0	1219.4
42.5°	1056.7	1082.1	1119.4	1155.3	1167.2
45°	995.5	1019.4	1064.2	1104.5	1113.5
47.5°	932.9	959.7	1007.5	1047.8	1062.7
50°	870.2	898.5	949.3	991.1	1000.0
52.5°	807.5	837.3	891.1	935.8	940.3
55°	741.8	774.6	831.4	874.6	883.6
57.5°	682.1	710.5	771.7	816.4	826.9
60°	616.4	647.8	713.5	755.2	768.7
62.5°	553.7	586.6	655.2	697.0	709.0
65°	488.1	525.4	592.6	641.8	653.7
67.5°	431.4	467.2	538.8	586.6	598.5
70°	365.7	406.0	482.1	531.4	543.3
72.5°	309.0	350.8	426.9	474.6	492.6
75°	247.8	295.5	371.7	422.4	434.3
77.5°	188.1	243.3	320.9	359.7	359.7
80°	134.3	192.5	264.2	282.1	285.1
82.5°	88.1	144.8	195.5	194.0	194.0
85°	50.7	94.0	116.4	113.4	113.4
87.5°	19.4	38.8	41.8	41.8	40.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)