

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: P276501

Luminaire Tested: **24CZ2-50HE-S-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276501
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: 24CZ2-50HE-S-UNV-L82765-W2A1-U-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4986.9 lumens
Efficiency: N/A
Efficacy: 138.2 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

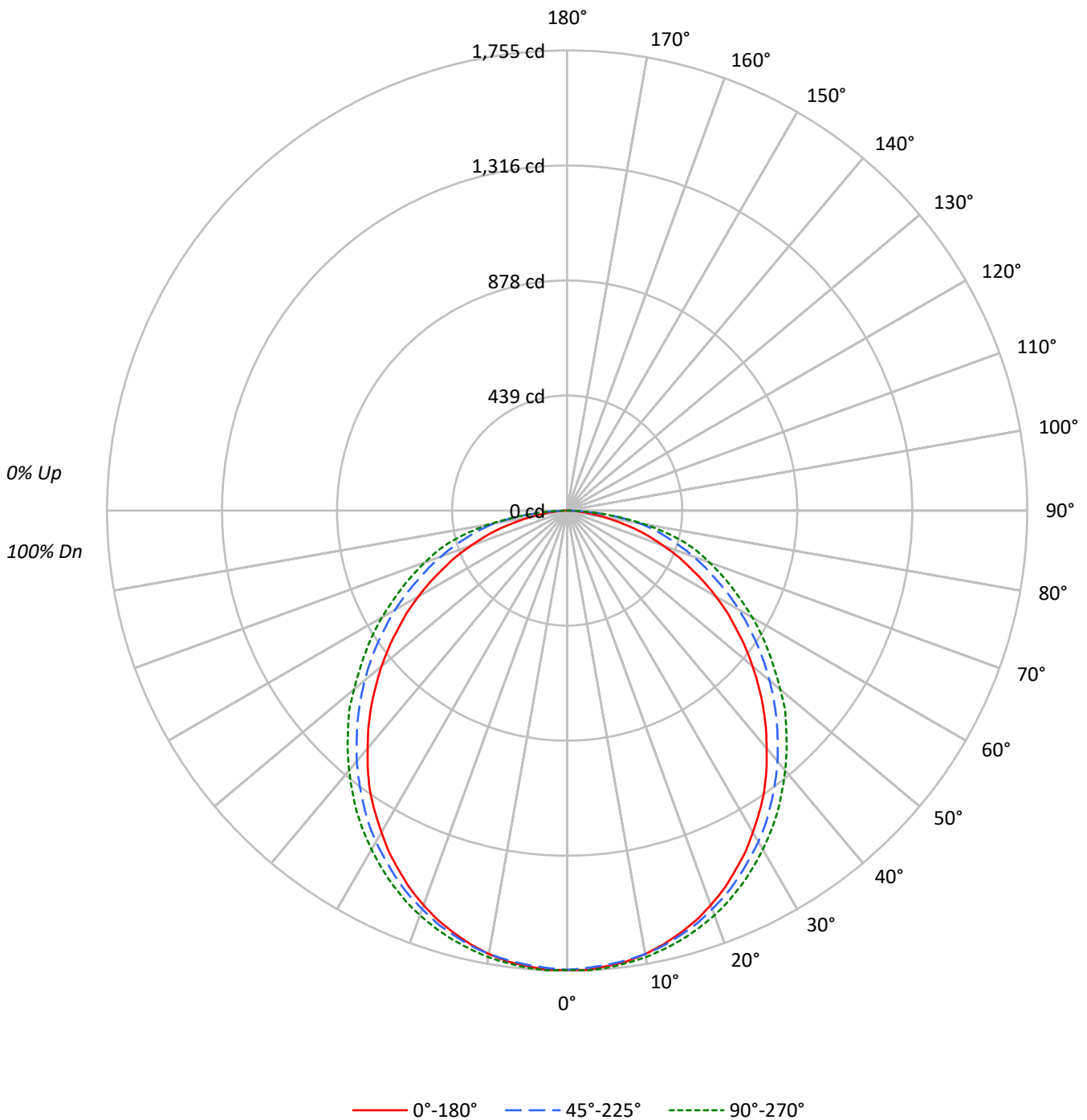
Input Watts (W): 36.084
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2357	2357	2357
5°	2355	2349	2364
10°	2346	2346	2363
15°	2323	2334	2359
20°	2293	2316	2352
25°	2250	2293	2337
30°	2200	2267	2318
35°	2152	2230	2300
40°	2078	2192	2273
45°	2010	2149	2249
50°	1933	2109	2222
55°	1847	2070	2200
60°	1760	2038	2195
65°	1649	2002	2209
70°	1527	2013	2268
75°	1367	2050	2396
80°	1105	2173	2344
85°	832	1908	1859



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.9	3.3
10°-20°	473.9	9.5
20°-30°	712.4	14.3
30°-40°	848.6	17.0
40°-50°	868.5	17.4
50°-60°	781.9	15.7
60°-70°	614.0	12.3
70°-80°	398.5	8.0
80°-90°	123.3	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°	1352.2	27.1
0°-40°	2200.7	44.1
0°-60°	3851.1	77.2
0°-90°	4986.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4986.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1752	1752	1752	1752	1752	
5°	1744	1747	1739	1749	1750	166
15°	1668	1673	1676	1690	1693	470
25°	1516	1529	1544	1570	1574	698
35°	1310	1326	1358	1391	1400	817
45°	1056	1082	1129	1172	1182	815
55°	787	822	882	928	938	706
65°	518	558	629	681	694	516
75°	263	314	394	448	461	278
85°	54	100	124	120	120	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1751.9	1751.9	1751.9	1751.9	1751.9
2.5°	1753.5	1753.5	1745.6	1753.5	1755.1
5°	1744.0	1747.2	1739.2	1748.8	1750.3
7.5°	1734.5	1734.5	1729.7	1739.2	1740.8
10°	1717.1	1718.7	1717.1	1728.2	1729.7
12.5°	1694.9	1698.1	1699.6	1710.7	1712.3
15°	1668.0	1672.7	1675.9	1690.1	1693.3
17.5°	1637.9	1642.6	1650.5	1666.4	1669.6
20°	1601.4	1607.8	1617.3	1637.9	1642.6
22.5°	1561.8	1568.2	1584.0	1603.0	1610.9
25°	1515.9	1528.6	1544.4	1569.8	1574.5
27.5°	1470.0	1481.1	1501.6	1528.6	1534.9
30°	1416.1	1433.5	1458.9	1485.8	1492.1
32.5°	1363.8	1381.3	1411.4	1439.9	1447.8
35°	1310.0	1325.8	1357.5	1390.8	1400.3
37.5°	1248.2	1268.8	1303.6	1336.9	1346.4
40°	1183.3	1208.6	1248.2	1283.1	1294.1
42.5°	1121.5	1148.4	1188.0	1226.0	1238.7
45°	1056.5	1081.9	1129.4	1172.2	1181.7
47.5°	990.0	1018.5	1069.2	1112.0	1127.8
50°	923.5	953.6	1007.4	1051.8	1061.3
52.5°	857.0	888.6	945.7	993.2	997.9
55°	787.3	822.1	882.3	928.2	937.7
57.5°	723.9	754.0	818.9	866.5	877.5
60°	654.2	687.5	757.2	801.5	815.8
62.5°	587.7	622.5	695.4	739.7	752.4
65°	518.0	557.6	628.9	681.1	693.8
67.5°	457.8	495.8	571.8	622.5	635.2
70°	388.1	430.9	511.6	563.9	576.6
72.5°	327.9	372.2	453.0	503.7	522.7
75°	262.9	313.6	394.4	448.3	460.9
77.5°	199.6	258.2	340.6	381.7	381.7
80°	142.6	204.3	280.4	299.4	302.5
82.5°	93.5	153.6	207.5	205.9	205.9
85°	53.9	99.8	123.6	120.4	120.4
87.5°	20.6	41.2	44.4	44.4	42.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)