

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: P276164

Luminaire Tested: **24CZ2-45-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276164
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-45-UNV-L82765-W2A1-U-5000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4414.0 lumens
Efficiency: N/A
Efficacy: 123.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

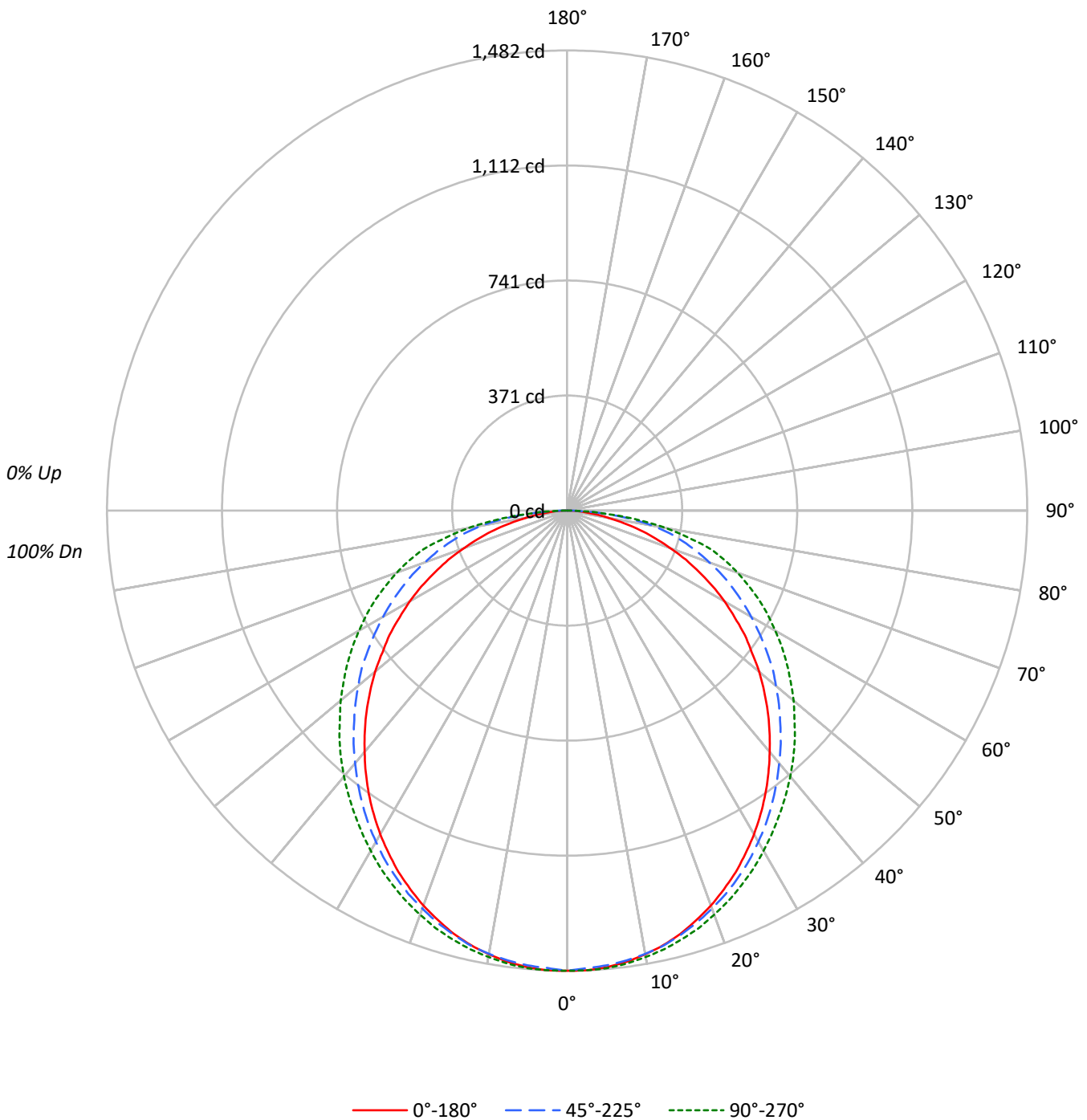
Input Watts (W): 35.805
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1994	1994	1994
5°	1994	1986	1998
10°	1983	1981	1995
15°	1966	1970	1991
20°	1938	1953	1983
25°	1907	1935	1975
30°	1870	1913	1966
35°	1829	1890	1960
40°	1783	1865	1964
45°	1738	1847	1973
50°	1690	1838	1992
55°	1638	1835	2028
60°	1574	1843	2081
65°	1492	1871	2172
70°	1385	1918	2295
75°	1264	2014	2489
80°	1039	2169	2488
85°	797	2001	2138



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.2	3.2
10°-20°	400.2	9.1
20°-30°	602.2	13.6
30°-40°	721.6	16.3
40°-50°	752.0	17.0
50°-60°	699.6	15.9
60°-70°	576.3	13.1
70°-80°	392.5	8.9
80°-90°	129.6	2.9
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°	1142.5	25.9
0°-40°	1864.1	42.2
0°-60°	3315.7	75.1
0°-90°	4414.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4414.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1482	1482	1482	1482	1482	
5°	1476	1476	1470	1478	1479	140
15°	1411	1413	1414	1428	1429	398
25°	1285	1290	1304	1326	1330	591
35°	1114	1127	1150	1182	1193	696
45°	913	932	971	1019	1037	704
55°	698	722	782	844	865	622
65°	468	508	588	657	682	465
75°	243	298	387	457	479	256
85°	52	100	130	138	138	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1482.0	1482.0	1482.0	1482.0	1482.0
2.5°	1482.0	1482.0	1474.6	1482.0	1482.0
5°	1476.1	1476.1	1470.2	1477.6	1479.1
7.5°	1465.8	1467.3	1461.4	1470.2	1471.7
10°	1451.1	1452.5	1449.6	1458.4	1459.9
12.5°	1433.4	1434.9	1434.9	1445.2	1446.6
15°	1411.3	1412.8	1414.2	1427.5	1429.0
17.5°	1383.3	1387.7	1390.7	1406.9	1409.8
20°	1353.8	1358.3	1364.1	1381.8	1384.8
22.5°	1319.9	1325.8	1336.2	1355.3	1359.7
25°	1284.6	1290.5	1303.7	1325.8	1330.3
27.5°	1244.8	1253.7	1269.9	1293.4	1299.3
30°	1203.6	1212.4	1231.6	1256.6	1265.4
32.5°	1159.4	1171.2	1193.3	1221.2	1230.1
35°	1113.7	1127.0	1150.5	1181.5	1193.3
37.5°	1065.1	1079.8	1107.8	1141.7	1156.4
40°	1015.0	1032.7	1062.1	1101.9	1118.1
42.5°	964.9	981.1	1018.0	1060.7	1078.4
45°	913.4	932.5	970.8	1019.4	1037.1
47.5°	860.3	879.5	925.1	976.7	992.9
50°	807.3	826.4	878.0	932.5	951.7
52.5°	749.8	774.9	833.8	888.3	907.5
55°	698.3	721.8	782.2	844.1	864.7
57.5°	639.4	667.3	733.6	798.5	820.5
60°	584.8	614.3	685.0	751.3	773.4
62.5°	528.9	561.3	636.4	704.2	729.2
65°	468.5	508.2	587.8	657.0	682.1
67.5°	414.0	455.2	539.2	609.9	632.0
70°	352.1	402.2	487.6	558.3	583.4
72.5°	299.1	349.1	439.0	508.2	533.3
75°	243.1	297.6	387.4	456.7	478.8
77.5°	187.1	247.5	337.4	390.4	397.8
80°	134.1	197.4	279.9	310.8	321.1
82.5°	94.3	151.7	206.2	226.9	232.8
85°	51.6	100.2	129.6	138.5	138.5
87.5°	22.1	42.7	51.6	53.0	54.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)