

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: P276160

Luminaire Tested: **24CZ2-45-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276160
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-3000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4048.0 lumens
Efficiency: N/A
Efficacy: 116.7 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

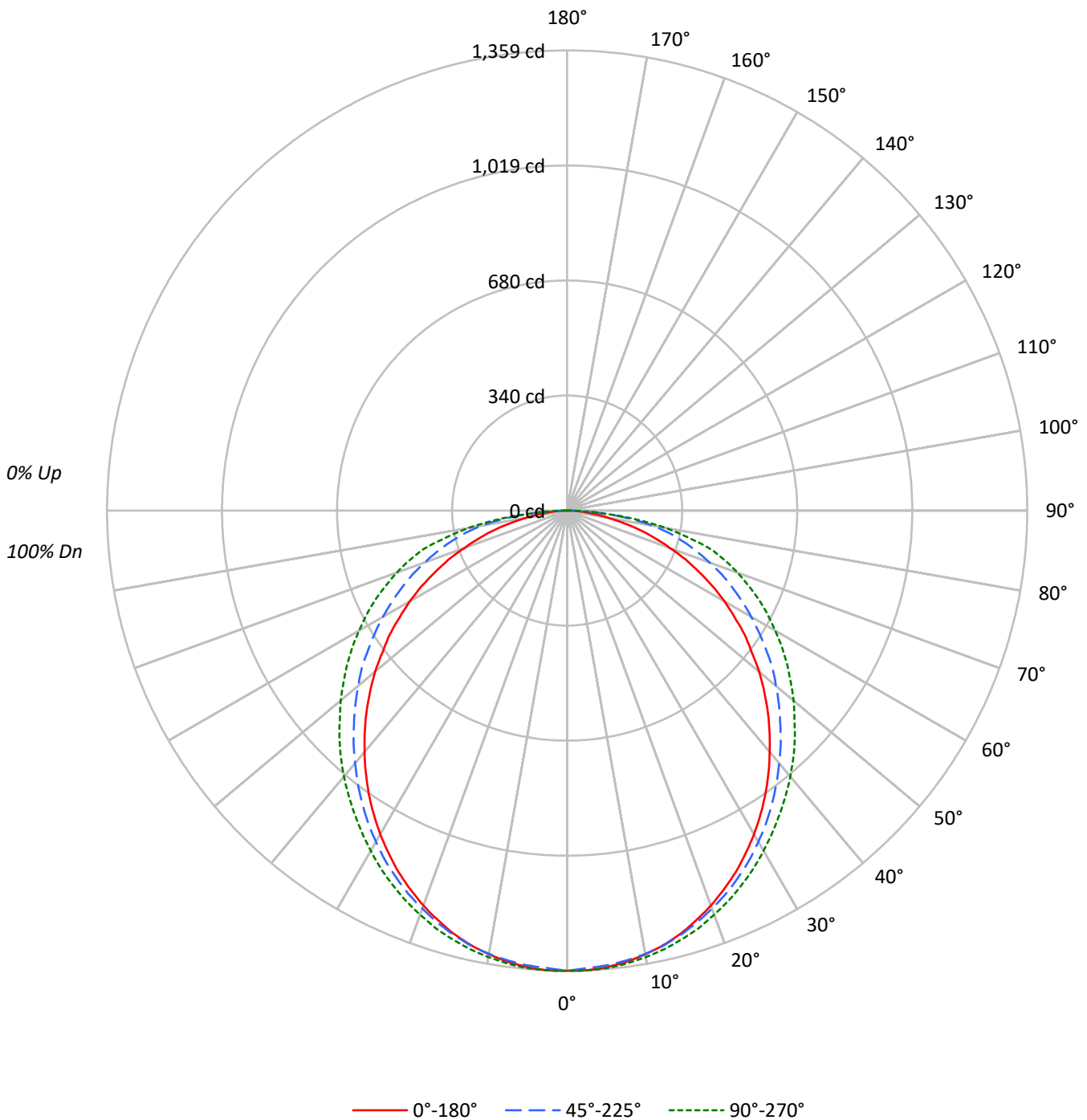
Input Watts (W): 34.689
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1829	1829	1829
5°	1828	1821	1832
10°	1818	1816	1829
15°	1803	1807	1825
20°	1778	1791	1818
25°	1749	1775	1811
30°	1715	1755	1803
35°	1678	1733	1797
40°	1635	1711	1801
45°	1594	1694	1810
50°	1550	1685	1827
55°	1502	1683	1860
60°	1443	1690	1909
65°	1368	1716	1991
70°	1270	1759	2105
75°	1159	1847	2283
80°	952	1989	2282
85°	730	1836	1961



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.5	3.2
10°-20°	367.0	9.1
20°-30°	552.2	13.6
30°-40°	661.8	16.3
40°-50°	689.6	17.0
50°-60°	641.6	15.9
60°-70°	528.5	13.1
70°-80°	359.9	8.9
80°-90°	118.8	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°	1047.7	25.9
0°-40°	1709.5	42.2
0°-60°	3040.8	75.1
0°-90°	4048.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4048.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1359	1359	1359	1359	1359	
5°	1354	1354	1348	1355	1356	128
15°	1294	1296	1297	1309	1310	365
25°	1178	1184	1196	1216	1220	542
35°	1021	1034	1055	1084	1094	638
45°	838	855	890	935	951	646
55°	640	662	717	774	793	571
65°	430	466	539	602	626	426
75°	223	273	355	419	439	235
85°	47	92	119	127	127	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1359.1	1359.1	1359.1	1359.1	1359.1
2.5°	1359.1	1359.1	1352.3	1359.1	1359.1
5°	1353.7	1353.7	1348.3	1355.0	1356.4
7.5°	1344.2	1345.6	1340.2	1348.3	1349.6
10°	1330.7	1332.1	1329.4	1337.5	1338.8
12.5°	1314.5	1315.8	1315.8	1325.3	1326.7
15°	1294.2	1295.6	1296.9	1309.1	1310.4
17.5°	1268.6	1272.6	1275.3	1290.2	1292.9
20°	1241.5	1245.6	1251.0	1267.2	1269.9
22.5°	1210.5	1215.9	1225.3	1242.9	1246.9
25°	1178.0	1183.5	1195.6	1215.9	1219.9
27.5°	1141.6	1149.7	1164.5	1186.2	1191.6
30°	1103.7	1111.9	1129.4	1152.4	1160.5
32.5°	1063.2	1074.0	1094.3	1120.0	1128.1
35°	1021.3	1033.5	1055.1	1083.5	1094.3
37.5°	976.8	990.3	1015.9	1047.0	1060.5
40°	930.8	947.0	974.1	1010.5	1025.4
42.5°	884.9	899.7	933.5	972.7	988.9
45°	837.6	855.2	890.3	934.9	951.1
47.5°	789.0	806.5	848.4	895.7	910.6
50°	740.3	757.9	805.2	855.2	872.7
52.5°	687.6	710.6	764.7	814.6	832.2
55°	640.4	662.0	717.4	774.1	793.0
57.5°	586.3	612.0	672.8	732.2	752.5
60°	536.3	563.4	628.2	689.0	709.3
62.5°	485.0	514.7	583.6	645.8	668.7
65°	429.6	466.1	539.0	602.5	625.5
67.5°	379.6	417.5	494.5	559.3	579.6
70°	322.9	368.8	447.2	512.0	535.0
72.5°	274.2	320.2	402.6	466.1	489.1
75°	222.9	272.9	355.3	418.8	439.1
77.5°	171.6	227.0	309.4	358.0	364.8
80°	122.9	181.0	256.7	285.1	294.5
82.5°	86.5	139.2	189.1	208.0	213.5
85°	47.3	91.9	118.9	127.0	127.0
87.5°	20.3	39.2	47.3	48.6	50.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)