

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: P276161

Luminaire Tested: **24CZ2-45-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276161
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-3500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4187.0 lumens
Efficiency: N/A
Efficacy: 119.1 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

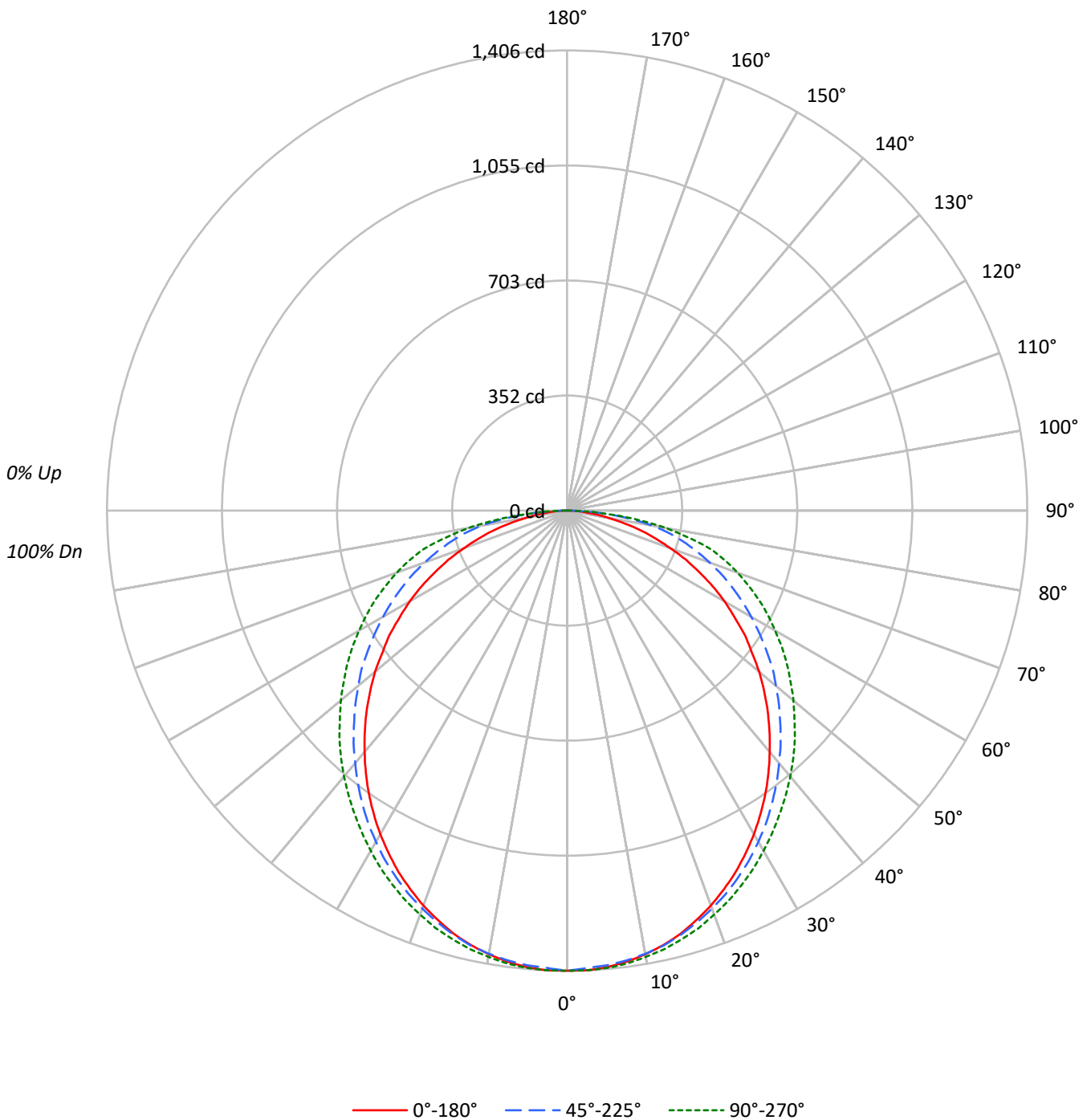
Input Watts (W): 35.154
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1891	1891	1891
5°	1891	1884	1895
10°	1881	1879	1892
15°	1865	1869	1888
20°	1839	1853	1881
25°	1809	1836	1873
30°	1774	1815	1865
35°	1735	1793	1859
40°	1691	1770	1863
45°	1649	1752	1872
50°	1603	1743	1890
55°	1554	1741	1924
60°	1493	1749	1974
65°	1415	1775	2060
70°	1314	1819	2177
75°	1199	1910	2361
80°	986	2057	2360
85°	755	1899	2029



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.0	3.2
10°-20°	379.6	9.1
20°-30°	571.2	13.6
30°-40°	684.5	16.3
40°-50°	713.3	17.0
50°-60°	663.7	15.9
60°-70°	546.6	13.1
70°-80°	372.3	8.9
80°-90°	122.9	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°	1083.7	25.9
0°-40°	1768.2	42.2
0°-60°	3145.2	75.1
0°-90°	4187.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4187.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1406	1406	1406	1406	1406	
5°	1400	1400	1395	1402	1403	133
15°	1339	1340	1342	1354	1356	377
25°	1218	1224	1237	1258	1262	561
35°	1056	1069	1091	1121	1132	660
45°	866	884	921	967	984	668
55°	662	685	742	801	820	590
65°	444	482	558	623	647	441
75°	231	282	368	433	454	243
85°	49	95	123	131	131	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1405.8	1405.8	1405.8	1405.8	1405.8
2.5°	1405.8	1405.8	1398.8	1405.8	1405.8
5°	1400.2	1400.2	1394.6	1401.6	1403.0
7.5°	1390.4	1391.8	1386.2	1394.6	1396.0
10°	1376.4	1377.8	1375.0	1383.4	1384.8
12.5°	1359.7	1361.1	1361.1	1370.8	1372.2
15°	1338.7	1340.1	1341.5	1354.1	1355.5
17.5°	1312.1	1316.3	1319.1	1334.5	1337.3
20°	1284.2	1288.4	1294.0	1310.7	1313.5
22.5°	1252.1	1257.6	1267.4	1285.6	1289.8
25°	1218.5	1224.1	1236.7	1257.6	1261.8
27.5°	1180.8	1189.2	1204.5	1226.9	1232.5
30°	1141.7	1150.0	1168.2	1192.0	1200.4
32.5°	1099.7	1110.9	1131.9	1158.4	1166.8
35°	1056.4	1069.0	1091.4	1120.7	1131.9
37.5°	1010.3	1024.3	1050.8	1083.0	1096.9
40°	962.8	979.6	1007.5	1045.2	1060.6
42.5°	915.3	930.7	965.6	1006.1	1022.9
45°	866.4	884.5	920.9	967.0	983.8
47.5°	816.1	834.2	877.6	926.5	941.8
50°	765.8	783.9	832.8	884.5	902.7
52.5°	711.3	735.0	790.9	842.6	860.8
55°	662.4	684.7	742.0	800.7	820.3
57.5°	606.5	633.0	695.9	757.4	778.3
60°	554.8	582.7	649.8	712.7	733.6
62.5°	501.7	532.4	603.7	668.0	691.7
65°	444.4	482.1	557.6	623.2	647.0
67.5°	392.7	431.8	511.4	578.5	599.5
70°	334.0	381.5	462.5	529.6	553.4
72.5°	283.7	331.2	416.4	482.1	505.9
75°	230.6	282.3	367.5	433.2	454.2
77.5°	177.5	234.8	320.0	370.3	377.3
80°	127.2	187.2	265.5	294.8	304.6
82.5°	89.4	143.9	195.6	215.2	220.8
85°	48.9	95.0	123.0	131.4	131.4
87.5°	21.0	40.5	48.9	50.3	51.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)