

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: P276211

Luminaire Tested: **24CZ2-45HE-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276211
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: 24CZ2-45HE-UNV-L92765-W2A1-U-5700K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3999.7 lumens
Efficiency: N/A
Efficacy: 123.6 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

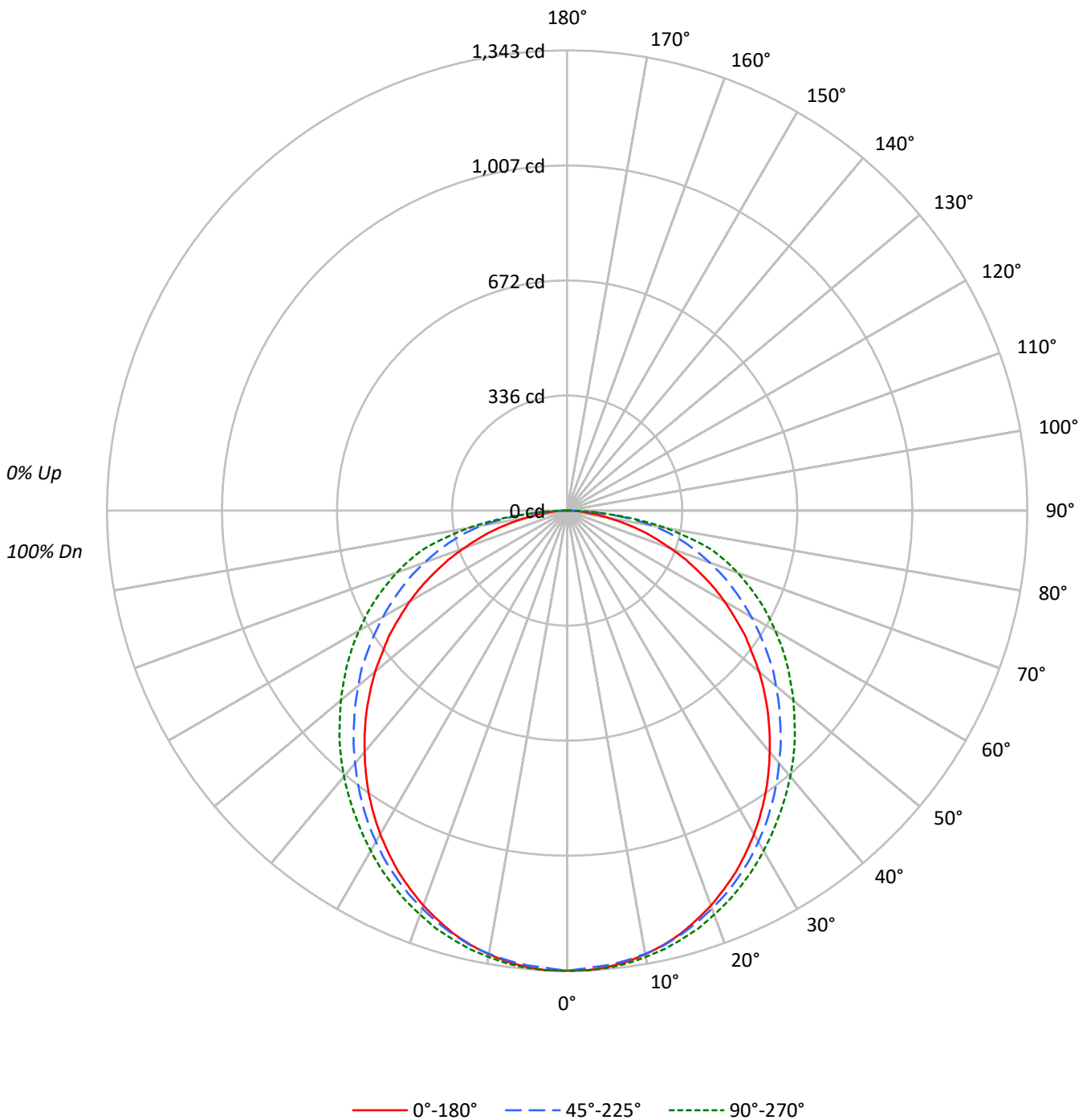
Input Watts (W): 32.364
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1807	1807	1807
5°	1806	1799	1810
10°	1796	1795	1807
15°	1781	1785	1804
20°	1756	1770	1797
25°	1728	1754	1790
30°	1694	1734	1782
35°	1658	1712	1776
40°	1615	1690	1780
45°	1575	1674	1788
50°	1531	1665	1805
55°	1484	1663	1838
60°	1426	1670	1886
65°	1351	1696	1968
70°	1255	1738	2079
75°	1145	1825	2255
80°	941	1965	2255
85°	721	1814	1937



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.0	3.2
10°-20°	362.6	9.1
20°-30°	545.6	13.6
30°-40°	653.9	16.3
40°-50°	681.4	17.0
50°-60°	634.0	15.9
60°-70°	522.2	13.1
70°-80°	355.6	8.9
80°-90°	117.4	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°	1035.2	25.9
0°-40°	1689.1	42.2
0°-60°	3004.5	75.1
0°-90°	3999.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3999.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1343	1343	1343	1343	1343	
5°	1338	1338	1332	1339	1340	127
15°	1279	1280	1282	1294	1295	360
25°	1164	1169	1181	1201	1205	536
35°	1009	1021	1042	1071	1081	631
45°	828	845	880	924	940	638
55°	633	654	709	765	784	564
65°	424	460	533	595	618	421
75°	220	270	351	414	434	232
85°	47	91	118	126	126	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1342.9	1342.9	1342.9	1342.9	1342.9
2.5°	1342.9	1342.9	1336.2	1342.9	1342.9
5°	1337.5	1337.5	1332.2	1338.9	1340.2
7.5°	1328.2	1329.5	1324.2	1332.2	1333.5
10°	1314.8	1316.2	1313.5	1321.5	1322.9
12.5°	1298.8	1300.2	1300.2	1309.5	1310.8
15°	1278.8	1280.1	1281.5	1293.5	1294.8
17.5°	1253.4	1257.4	1260.1	1274.8	1277.5
20°	1226.7	1230.8	1236.1	1252.1	1254.8
22.5°	1196.0	1201.4	1210.7	1228.1	1232.1
25°	1164.0	1169.3	1181.4	1201.4	1205.4
27.5°	1128.0	1136.0	1150.7	1172.0	1177.4
30°	1090.6	1098.6	1116.0	1138.6	1146.7
32.5°	1050.5	1061.2	1081.2	1106.6	1114.6
35°	1009.2	1021.2	1042.5	1070.6	1081.2
37.5°	965.1	978.5	1003.8	1034.5	1047.9
40°	919.7	935.7	962.4	998.5	1013.2
42.5°	874.3	889.0	922.4	961.1	977.1
45°	827.6	845.0	879.7	923.7	939.7
47.5°	779.6	796.9	838.3	885.0	899.7
50°	731.5	748.9	795.6	845.0	862.3
52.5°	679.4	702.1	755.5	804.9	822.3
55°	632.7	654.1	708.8	764.9	783.6
57.5°	579.3	604.7	664.8	723.5	743.5
60°	529.9	556.6	620.7	680.8	700.8
62.5°	479.2	508.6	576.7	638.1	660.8
65°	424.5	460.5	532.6	595.4	618.0
67.5°	375.1	412.5	488.6	552.6	572.7
70°	319.0	364.4	441.8	505.9	528.6
72.5°	271.0	316.4	397.8	460.5	483.2
75°	220.3	269.6	351.1	413.8	433.8
77.5°	169.5	224.3	305.7	353.7	360.4
80°	121.5	178.9	253.6	281.7	291.0
82.5°	85.4	137.5	186.9	205.6	210.9
85°	46.7	90.8	117.5	125.5	125.5
87.5°	20.0	38.7	46.7	48.1	49.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)