

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: P276208

Luminaire Tested: **24CZ2-45HE-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276208
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-4500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3844.6 lumens
Efficiency: N/A
Efficacy: 120.2 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

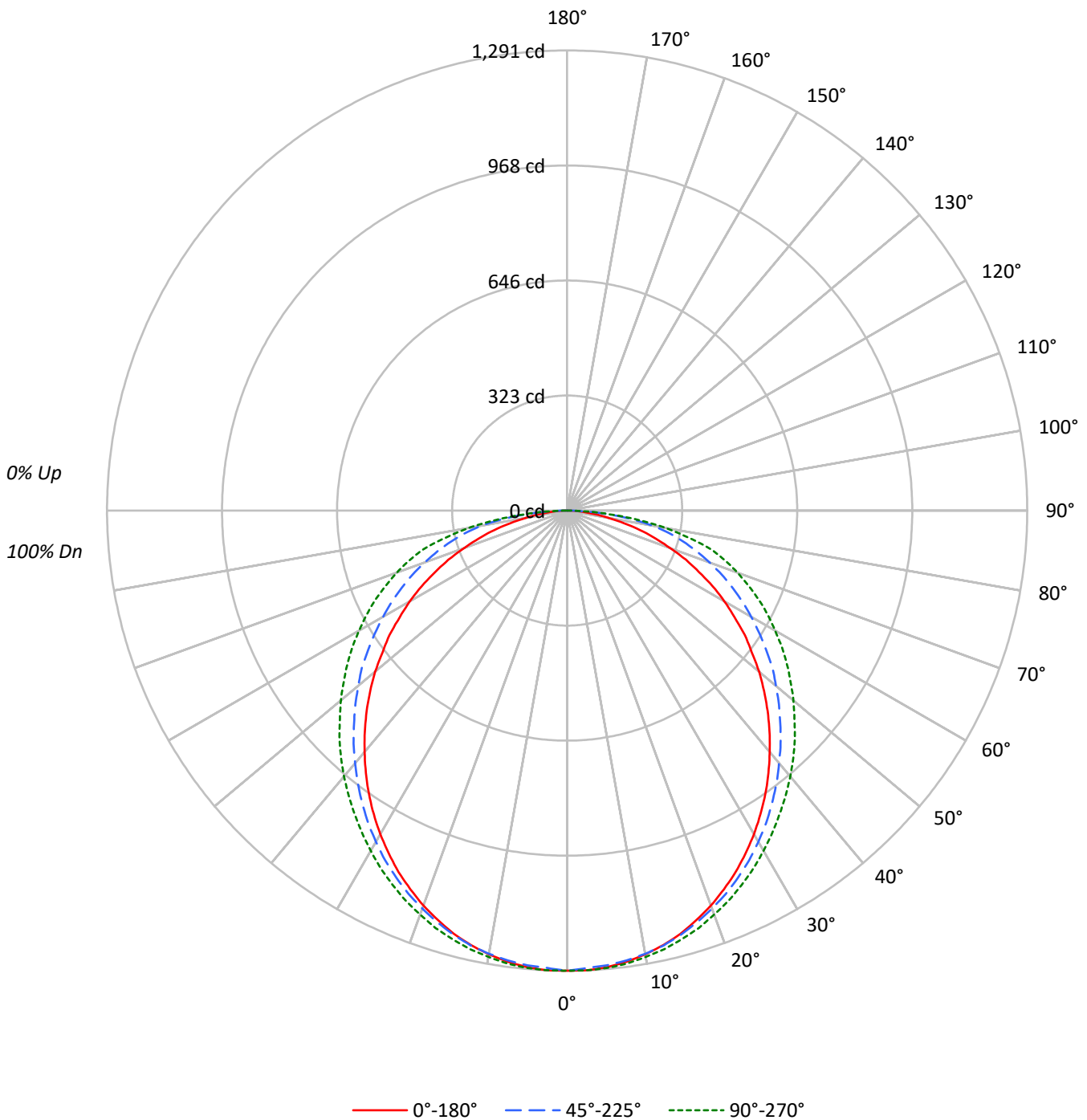
Input Watts (W): 31.992
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1737	1737	1737
5°	1737	1729	1740
10°	1727	1725	1737
15°	1712	1716	1734
20°	1688	1701	1727
25°	1661	1686	1720
30°	1629	1667	1712
35°	1593	1646	1707
40°	1553	1625	1711
45°	1514	1609	1719
50°	1472	1601	1735
55°	1427	1598	1767
60°	1371	1605	1813
65°	1299	1630	1891
70°	1207	1671	1999
75°	1101	1755	2168
80°	905	1889	2167
85°	693	1743	1862



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.1	3.2
10°-20°	348.5	9.1
20°-30°	524.5	13.6
30°-40°	628.5	16.3
40°-50°	655.0	17.0
50°-60°	609.4	15.9
60°-70°	501.9	13.1
70°-80°	341.8	8.9
80°-90°	112.8	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°	995.1	25.9
0°-40°	1623.6	42.2
0°-60°	2888.0	75.1
0°-90°	3844.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3844.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1291	1291	1291	1291	1291	
5°	1286	1286	1280	1287	1288	122
15°	1229	1230	1232	1243	1245	346
25°	1119	1124	1136	1155	1159	515
35°	970	982	1002	1029	1039	606
45°	796	812	846	888	903	614
55°	608	629	681	735	753	542
65°	408	443	512	572	594	405
75°	212	259	338	398	417	223
85°	45	87	113	121	121	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1290.8	1290.8	1290.8	1290.8	1290.8
2.5°	1290.8	1290.8	1284.4	1290.8	1290.8
5°	1285.7	1285.7	1280.5	1286.9	1288.2
7.5°	1276.7	1278.0	1272.8	1280.5	1281.8
10°	1263.8	1265.1	1262.6	1270.3	1271.5
12.5°	1248.5	1249.7	1249.7	1258.7	1260.0
15°	1229.2	1230.5	1231.8	1243.3	1244.6
17.5°	1204.8	1208.7	1211.2	1225.4	1227.9
20°	1179.2	1183.0	1188.1	1203.5	1206.1
22.5°	1149.7	1154.8	1163.8	1180.4	1184.3
25°	1118.9	1124.0	1135.5	1154.8	1158.6
27.5°	1084.2	1091.9	1106.0	1126.6	1131.7
30°	1048.3	1056.0	1072.7	1094.5	1102.2
32.5°	1009.8	1020.1	1039.3	1063.7	1071.4
35°	970.0	981.6	1002.1	1029.0	1039.3
37.5°	927.7	940.5	964.9	994.4	1007.2
40°	884.1	899.4	925.1	959.8	973.9
42.5°	840.4	854.5	886.6	923.8	939.2
45°	795.5	812.2	845.6	887.9	903.3
47.5°	749.3	766.0	805.8	850.7	864.8
50°	703.1	719.8	764.7	812.2	828.9
52.5°	653.1	674.9	726.2	773.7	790.4
55°	608.2	628.7	681.3	735.2	753.2
57.5°	556.9	581.2	639.0	695.4	714.7
60°	509.4	535.1	596.6	654.4	673.6
62.5°	460.6	488.9	554.3	613.3	635.1
65°	408.0	442.7	512.0	572.3	594.1
67.5°	360.5	396.5	469.6	531.2	550.4
70°	306.7	350.3	424.7	486.3	508.1
72.5°	260.5	304.1	382.4	442.7	464.5
75°	211.7	259.2	337.5	397.8	417.0
77.5°	163.0	215.6	293.8	340.0	346.4
80°	116.8	171.9	243.8	270.7	279.7
82.5°	82.1	132.2	179.6	197.6	202.7
85°	44.9	87.3	112.9	120.6	120.6
87.5°	19.2	37.2	44.9	46.2	47.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)