

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: P276202

Luminaire Tested: **24CZ2-40HE-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276202
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: 24CZ2-40HE-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: 3632.7 lumens
Efficiency: N/A
Efficacy: 124.8 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

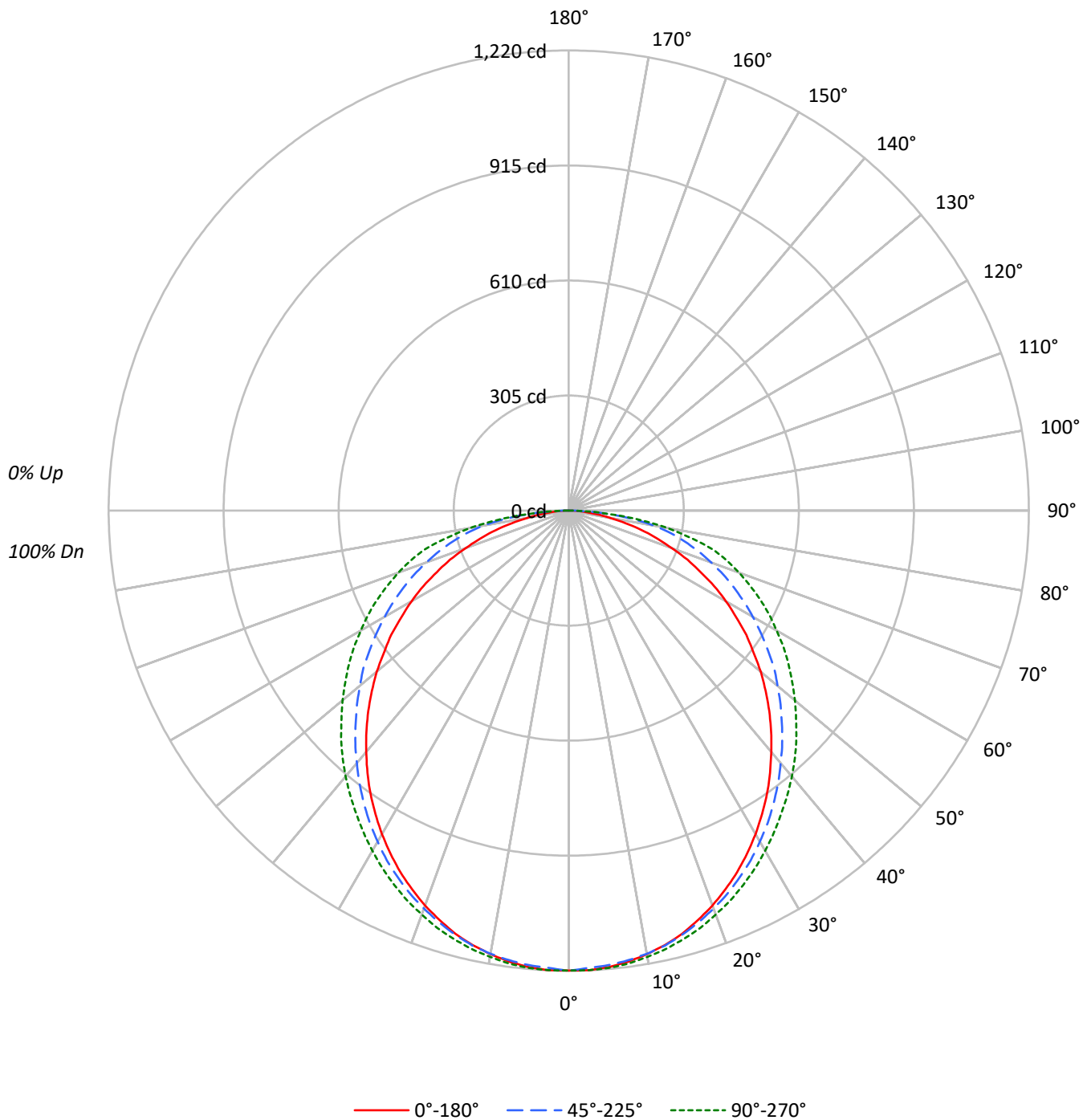
Input Watts (W): 29.109
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	108	103	98	94	105	100	96	92	96	93	89		92	89	87		89
2	98	89	82	76	95	87	80	75	83	78	73		80	75	71		77
3	89	78	69	62	86	76	68	62	73	66	61		70	64	60		68
4	81	69	59	52	79	67	59	52	65	57	51		62	56	51		60
5	74	61	52	45	72	60	51	45	58	50	44		56	49	44		54
6	69	55	46	39	67	54	45	39	52	44	39		50	44	38		49
7	64	50	41	35	62	49	40	34	47	40	34		46	39	34		45
8	59	45	37	31	58	45	36	31	43	36	30		42	35	30		41
9	55	42	33	28	54	41	33	28	40	33	27		39	32	27		38
10	52	38	30	25	51	38	30	25	37	30	25		36	29	25		35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1641	1641	1641
5°	1641	1634	1644
10°	1632	1630	1642
15°	1618	1621	1638
20°	1595	1608	1632
25°	1570	1593	1625
30°	1539	1575	1618
35°	1506	1555	1613
40°	1467	1535	1616
45°	1430	1520	1624
50°	1391	1513	1639
55°	1348	1510	1669
60°	1295	1517	1713
65°	1227	1540	1787
70°	1140	1579	1889
75°	1040	1658	2048
80°	855	1785	2048
85°	655	1647	1760



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.3	3.2
10°-20°	329.3	9.1
20°-30°	495.6	13.6
30°-40°	593.9	16.3
40°-50°	618.9	17.0
50°-60°	575.8	15.9
60°-70°	474.2	13.1
70°-80°	323.0	8.9
80°-90°	106.6	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°	940.2	25.9
0°-40°	1534.1	42.2
0°-60°	2728.8	75.1
0°-90°	3632.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3632.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1220	1220	1220	1220	1220	
5°	1215	1215	1210	1216	1217	115
15°	1162	1163	1164	1175	1176	327
25°	1057	1062	1073	1091	1095	487
35°	917	928	947	972	982	573
45°	752	767	799	839	854	580
55°	575	594	644	695	712	512
65°	386	418	484	541	561	383
75°	200	245	319	376	394	211
85°	42	82	107	114	114	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1219.6	1219.6	1219.6	1219.6	1219.6
2.5°	1219.6	1219.6	1213.6	1219.6	1219.6
5°	1214.8	1214.8	1209.9	1216.0	1217.2
7.5°	1206.3	1207.5	1202.7	1209.9	1211.2
10°	1194.2	1195.4	1193.0	1200.2	1201.5
12.5°	1179.6	1180.9	1180.9	1189.3	1190.5
15°	1161.5	1162.7	1163.9	1174.8	1176.0
17.5°	1138.4	1142.1	1144.5	1157.8	1160.2
20°	1114.2	1117.8	1122.7	1137.2	1139.6
22.5°	1086.3	1091.1	1099.6	1115.4	1119.0
25°	1057.2	1062.0	1072.9	1091.1	1094.8
27.5°	1024.5	1031.7	1045.1	1064.5	1069.3
30°	990.5	997.8	1013.5	1034.2	1041.4
32.5°	954.1	963.8	982.0	1005.1	1012.3
35°	916.6	927.5	946.9	972.3	982.0
37.5°	876.5	888.7	911.7	939.6	951.7
40°	835.3	849.9	874.1	906.9	920.2
42.5°	794.1	807.4	837.7	872.9	887.5
45°	751.7	767.4	799.0	839.0	853.5
47.5°	708.0	723.8	761.4	803.8	817.1
50°	664.4	680.1	722.6	767.4	783.2
52.5°	617.1	637.7	686.2	731.1	746.8
55°	574.7	594.1	643.8	694.7	711.7
57.5°	526.2	549.2	603.8	657.1	675.3
60°	481.3	505.6	563.8	618.3	636.5
62.5°	435.2	461.9	523.7	579.5	600.1
65°	385.5	418.3	483.7	540.7	561.3
67.5°	340.7	374.6	443.7	501.9	520.1
70°	289.8	331.0	401.3	459.5	480.1
72.5°	246.1	287.3	361.3	418.3	438.9
75°	200.0	244.9	318.9	375.8	394.0
77.5°	154.0	203.7	277.6	321.3	327.3
80°	110.3	162.5	230.4	255.8	264.3
82.5°	77.6	124.9	169.7	186.7	191.6
85°	42.4	82.4	106.7	114.0	114.0
87.5°	18.2	35.2	42.4	43.6	44.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)