

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: P276198

Luminaire Tested: **24CZ2-40HE-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276198
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-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3402.8 lumens
Efficiency: N/A
Efficacy: 118.8 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

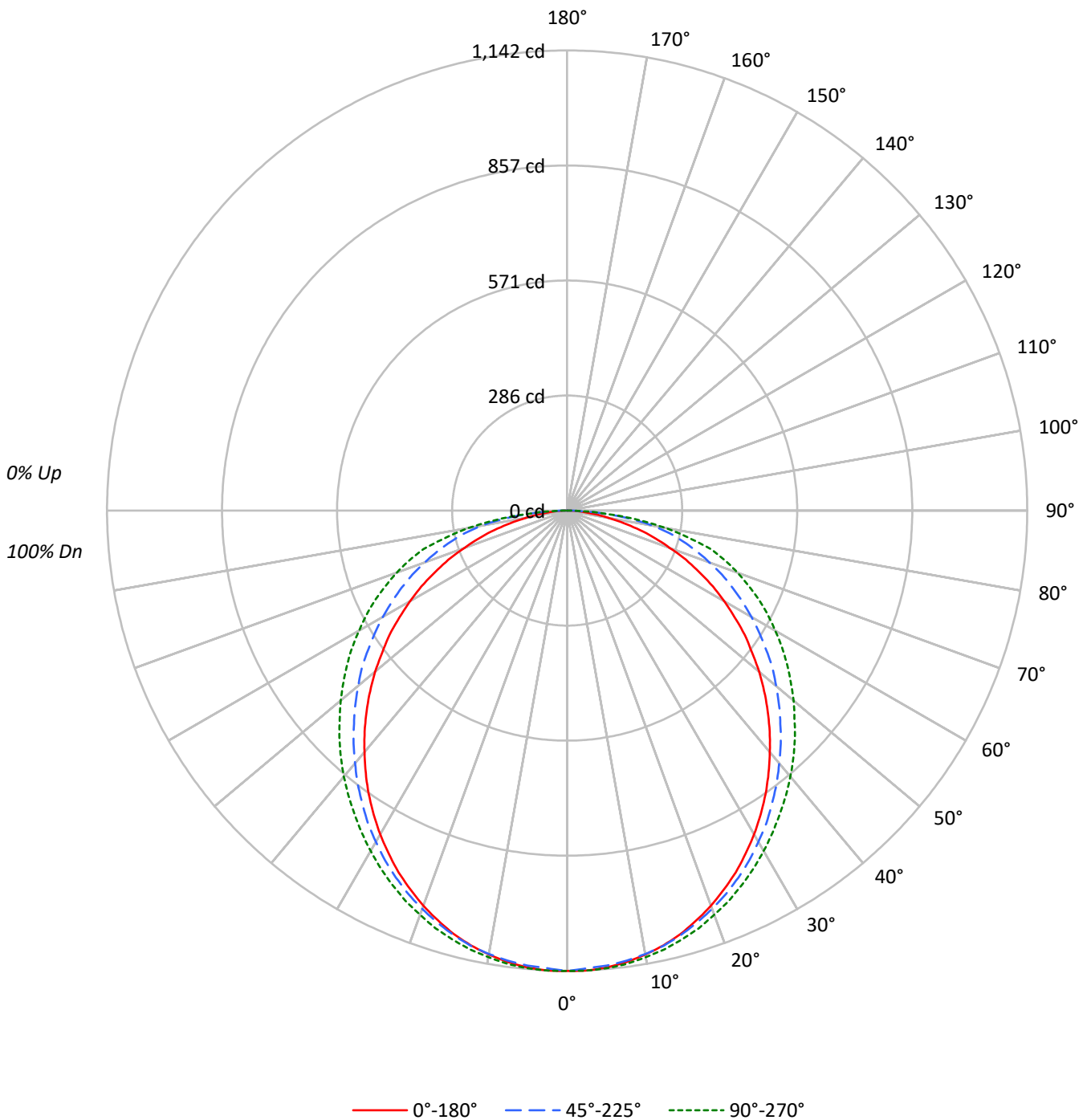
Input Watts (W): 28.644
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1537	1537	1537
5°	1537	1531	1540
10°	1528	1527	1538
15°	1516	1519	1534
20°	1494	1506	1528
25°	1470	1492	1522
30°	1441	1475	1516
35°	1410	1457	1511
40°	1374	1438	1514
45°	1340	1424	1521
50°	1303	1417	1536
55°	1263	1415	1564
60°	1213	1421	1604
65°	1150	1443	1674
70°	1068	1479	1769
75°	974	1553	1919
80°	800	1672	1918
85°	613	1542	1649



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.1	3.2
10°-20°	308.5	9.1
20°-30°	464.2	13.6
30°-40°	556.3	16.3
40°-50°	579.7	17.0
50°-60°	539.4	15.9
60°-70°	444.2	13.1
70°-80°	302.5	8.9
80°-90°	99.9	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°	880.7	25.9
0°-40°	1437.0	42.2
0°-60°	2556.1	75.1
0°-90°	3402.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3402.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1142	1142	1142	1142	1142	
5°	1138	1138	1133	1139	1140	108
15°	1088	1089	1090	1100	1102	307
25°	990	995	1005	1022	1026	456
35°	859	869	887	911	920	537
45°	704	719	748	786	800	543
55°	538	556	603	651	667	480
65°	361	392	453	506	526	358
75°	187	229	299	352	369	198
85°	40	77	100	107	107	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1142.5	1142.5	1142.5	1142.5	1142.5
2.5°	1142.5	1142.5	1136.8	1142.5	1142.5
5°	1137.9	1137.9	1133.4	1139.1	1140.2
7.5°	1130.0	1131.1	1126.6	1133.4	1134.5
10°	1118.6	1119.8	1117.5	1124.3	1125.4
12.5°	1105.0	1106.1	1106.1	1114.1	1115.2
15°	1088.0	1089.1	1090.2	1100.4	1101.6
17.5°	1066.4	1069.8	1072.1	1084.5	1086.8
20°	1043.7	1047.1	1051.6	1065.2	1067.5
22.5°	1017.5	1022.1	1030.0	1044.8	1048.2
25°	990.3	994.8	1005.1	1022.1	1025.5
27.5°	959.6	966.4	978.9	997.1	1001.6
30°	927.8	934.6	949.4	968.7	975.5
32.5°	893.8	902.8	919.9	941.5	948.3
35°	858.6	868.8	886.9	910.8	919.9
37.5°	821.1	832.4	854.0	880.1	891.5
40°	782.5	796.1	818.8	849.5	862.0
42.5°	743.9	756.3	784.7	817.7	831.3
45°	704.1	718.9	748.4	785.9	799.5
47.5°	663.2	678.0	713.2	752.9	765.4
50°	622.3	637.1	676.8	718.9	733.6
52.5°	578.0	597.4	642.8	684.8	699.6
55°	538.3	556.5	603.0	650.7	666.6
57.5°	492.9	514.5	565.6	615.5	632.6
60°	450.9	473.6	528.1	579.2	596.2
62.5°	407.7	432.7	490.6	542.8	562.1
65°	361.1	391.8	453.1	506.5	525.8
67.5°	319.1	350.9	415.6	470.2	487.2
70°	271.4	310.0	375.9	430.4	449.7
72.5°	230.5	269.1	338.4	391.8	411.1
75°	187.4	229.4	298.7	352.1	369.1
77.5°	144.2	190.8	260.1	300.9	306.6
80°	103.3	152.2	215.8	239.6	247.6
82.5°	72.7	117.0	159.0	174.9	179.4
85°	39.7	77.2	99.9	106.8	106.8
87.5°	17.0	32.9	39.7	40.9	42.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)