

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: P276372

Luminaire Tested: **24CZ2-40-S-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276372
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-40-S-UNV-L83050-W2A1-U-3000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3802.0 lumens
Efficiency: N/A
Efficacy: 125.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

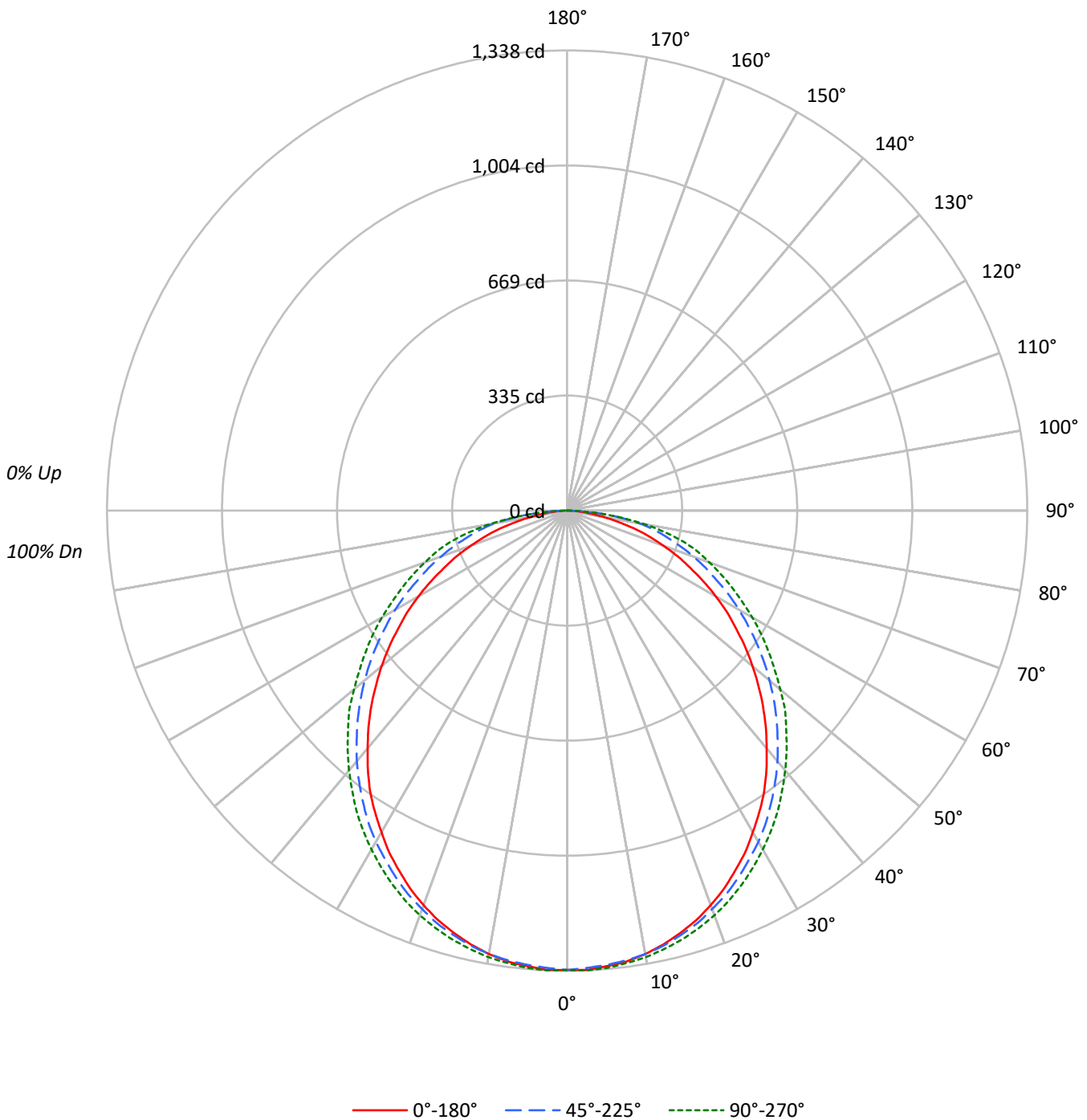
Input Watts (W): 30.350178
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69					69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42					42			
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1797	1797	1797
5°	1796	1791	1802
10°	1789	1789	1802
15°	1771	1780	1798
20°	1748	1765	1793
25°	1716	1748	1782
30°	1677	1728	1767
35°	1640	1700	1754
40°	1584	1671	1733
45°	1533	1639	1714
50°	1474	1608	1694
55°	1408	1578	1677
60°	1342	1554	1674
65°	1257	1526	1684
70°	1164	1535	1729
75°	1042	1563	1827
80°	842	1657	1788
85°	634	1454	1417



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.4	3.3
10°-20°	361.3	9.5
20°-30°	543.1	14.3
30°-40°	647.0	17.0
40°-50°	662.1	17.4
50°-60°	596.1	15.7
60°-70°	468.1	12.3
70°-80°	303.8	8.0
80°-90°	94.0	2.5
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°	1030.9	27.1
0°-40°	1677.8	44.1
0°-60°	2936.1	77.2
0°-90°	3802.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3802.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1336	1336	1336	1336	1336	
5°	1330	1332	1326	1333	1334	126
15°	1272	1275	1278	1289	1291	359
25°	1156	1165	1178	1197	1200	532
35°	999	1011	1035	1060	1068	623
45°	806	825	861	894	901	621
55°	600	627	673	708	715	538
65°	395	425	479	519	529	393
75°	200	239	301	342	351	212
85°	41	76	94	92	92	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1335.7	1335.7	1335.7	1335.7	1335.7
2.5°	1336.9	1336.9	1330.8	1336.9	1338.1
5°	1329.6	1332.0	1326.0	1333.3	1334.5
7.5°	1322.4	1322.4	1318.8	1326.0	1327.2
10°	1309.1	1310.3	1309.1	1317.6	1318.8
12.5°	1292.2	1294.6	1295.8	1304.3	1305.5
15°	1271.7	1275.3	1277.7	1288.6	1291.0
17.5°	1248.7	1252.3	1258.4	1270.5	1272.9
20°	1220.9	1225.8	1233.0	1248.7	1252.3
22.5°	1190.7	1195.6	1207.7	1222.1	1228.2
25°	1155.7	1165.4	1177.5	1196.8	1200.4
27.5°	1120.7	1129.2	1144.9	1165.4	1170.2
30°	1079.6	1092.9	1112.3	1132.8	1137.6
32.5°	1039.8	1053.1	1076.0	1097.8	1103.8
35°	998.7	1010.8	1035.0	1060.3	1067.6
37.5°	951.6	967.3	993.9	1019.3	1026.5
40°	902.1	921.4	951.6	978.2	986.7
42.5°	855.0	875.6	905.7	934.7	944.4
45°	805.5	824.8	861.1	893.7	900.9
47.5°	754.8	776.5	815.2	847.8	859.9
50°	704.1	727.0	768.1	801.9	809.1
52.5°	653.3	677.5	721.0	757.2	760.8
55°	600.2	626.8	672.7	707.7	714.9
57.5°	551.9	574.8	624.4	660.6	669.0
60°	498.8	524.1	577.3	611.1	621.9
62.5°	448.0	474.6	530.2	564.0	573.6
65°	394.9	425.1	479.4	519.3	529.0
67.5°	349.0	378.0	436.0	474.6	484.3
70°	295.9	328.5	390.1	429.9	439.6
72.5°	250.0	283.8	345.4	384.0	398.5
75°	200.5	239.1	300.7	341.8	351.4
77.5°	152.2	196.8	259.6	291.0	291.0
80°	108.7	155.8	213.8	228.2	230.7
82.5°	71.3	117.1	158.2	157.0	157.0
85°	41.1	76.1	94.2	91.8	91.8
87.5°	15.7	31.4	33.8	33.8	32.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)