

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: P276061

Luminaire Tested: **24CZ2-40HE-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276061
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-L82765-W2A1-U-3000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3637.3 lumens
Efficiency: N/A
Efficacy: 129.5 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

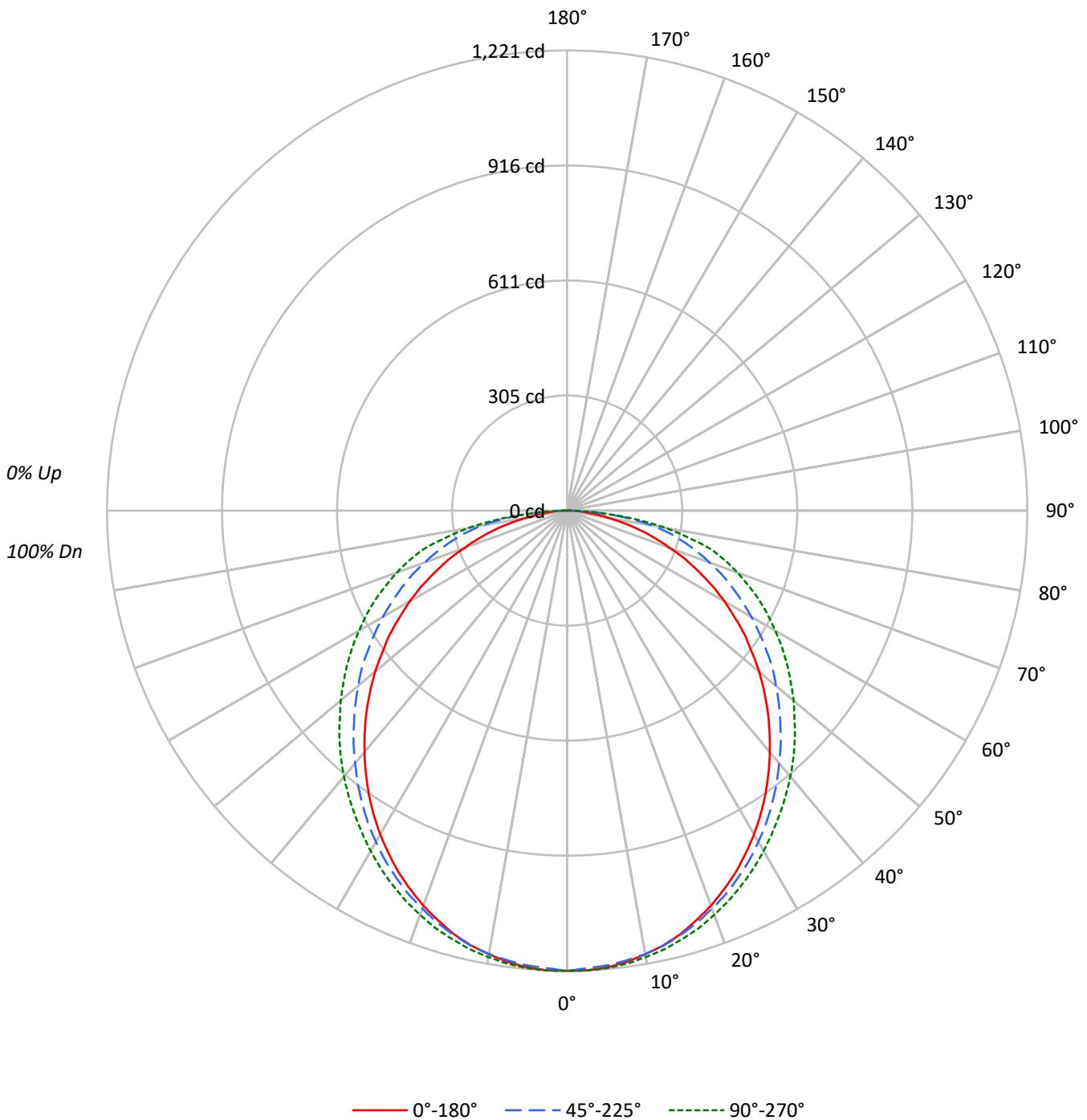
Input Watts (W): 28.086
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1643	1643	1643
5°	1643	1636	1646
10°	1634	1632	1644
15°	1620	1623	1640
20°	1597	1610	1634
25°	1572	1595	1627
30°	1541	1577	1620
35°	1507	1557	1615
40°	1469	1537	1618
45°	1432	1522	1626
50°	1392	1514	1641
55°	1350	1512	1672
60°	1297	1519	1715
65°	1229	1542	1790
70°	1141	1581	1891
75°	1041	1660	2051
80°	856	1788	2050
85°	656	1649	1761



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.5	3.2
10°-20°	329.7	9.1
20°-30°	496.2	13.6
30°-40°	594.7	16.3
40°-50°	619.7	17.0
50°-60°	576.5	15.9
60°-70°	474.9	13.1
70°-80°	323.4	8.9
80°-90°	106.8	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°	941.5	25.9
0°-40°	1536.1	42.2
0°-60°	2732.3	75.1
0°-90°	3637.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3637.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1221	1221	1221	1221	1221	
5°	1216	1216	1212	1218	1219	115
15°	1163	1164	1165	1176	1178	328
25°	1059	1063	1074	1093	1096	487
35°	918	929	948	974	983	574
45°	753	768	800	840	855	580
55°	575	595	645	696	713	513
65°	386	419	484	541	562	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°	1221.2	1221.2	1221.2	1221.2	1221.2
2.5°	1221.2	1221.2	1215.2	1221.2	1221.2
5°	1216.4	1216.4	1211.5	1217.6	1218.8
7.5°	1207.9	1209.1	1204.2	1211.5	1212.7
10°	1195.7	1197.0	1194.5	1201.8	1203.0
12.5°	1181.2	1182.4	1182.4	1190.9	1192.1
15°	1163.0	1164.2	1165.4	1176.3	1177.5
17.5°	1139.9	1143.5	1146.0	1159.3	1161.8
20°	1115.6	1119.3	1124.1	1138.7	1141.1
22.5°	1087.7	1092.6	1101.1	1116.8	1120.5
25°	1058.6	1063.4	1074.3	1092.6	1096.2
27.5°	1025.8	1033.1	1046.4	1065.8	1070.7
30°	991.8	999.1	1014.9	1035.5	1042.8
32.5°	955.4	965.1	983.3	1006.4	1013.6
35°	917.7	928.7	948.1	973.6	983.3
37.5°	877.7	889.8	912.9	940.8	953.0
40°	836.4	851.0	875.3	908.0	921.4
42.5°	795.1	808.5	838.8	874.0	888.6
45°	752.6	768.4	800.0	840.1	854.6
47.5°	708.9	724.7	762.4	804.8	818.2
50°	665.2	681.0	723.5	768.4	784.2
52.5°	617.9	638.5	687.1	732.0	747.8
55°	575.4	594.8	644.6	695.6	712.6
57.5°	526.9	549.9	604.5	658.0	676.2
60°	481.9	506.2	564.5	619.1	637.3
62.5°	435.8	462.5	524.4	580.3	600.9
65°	386.0	418.8	484.4	541.4	562.1
67.5°	341.1	375.1	444.3	502.6	520.8
70°	290.1	331.4	401.8	460.1	480.7
72.5°	246.4	287.7	361.8	418.8	439.5
75°	200.3	245.2	319.3	376.3	394.5
77.5°	154.2	203.9	278.0	321.7	327.8
80°	110.5	162.7	230.7	256.1	264.6
82.5°	77.7	125.0	170.0	186.9	191.8
85°	42.5	82.5	106.8	114.1	114.1
87.5°	18.2	35.2	42.5	43.7	44.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)