

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: P276067

Luminaire Tested: **24CZ2-40HE-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276067  
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-5700K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4016.7 lumens  
Efficiency: N/A  
Efficacy: 138.0 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

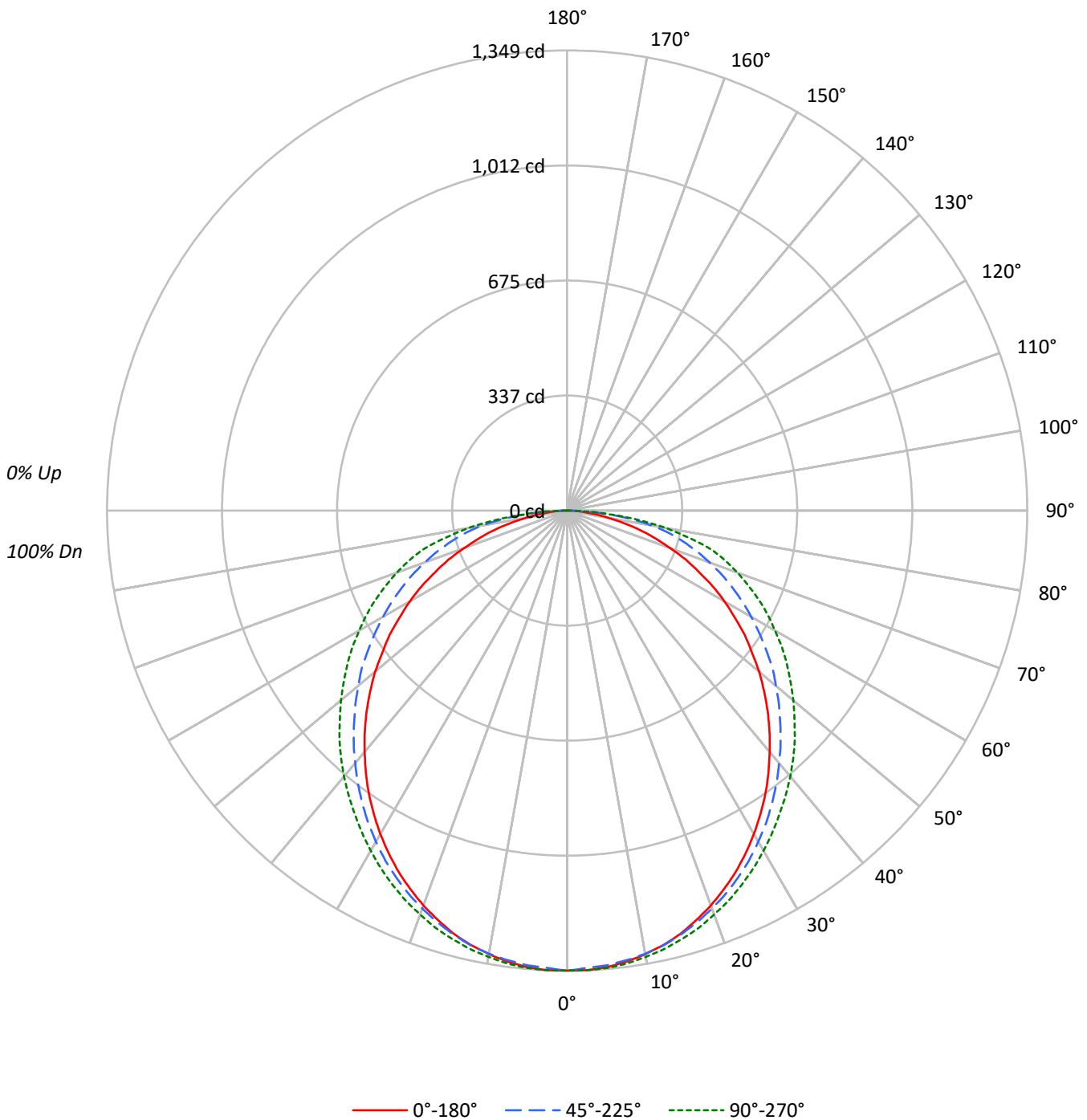
Input Watts (W): 29.109  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1815	1815	1815
5°	1814	1807	1818
10°	1804	1802	1815
15°	1789	1793	1811
20°	1764	1777	1804
25°	1735	1761	1797
30°	1702	1741	1789
35°	1665	1720	1783
40°	1622	1698	1787
45°	1581	1681	1796
50°	1538	1672	1813
55°	1491	1670	1846
60°	1432	1678	1894
65°	1357	1703	1976
70°	1260	1745	2089
75°	1150	1833	2265
80°	945	1974	2264
85°	724	1822	1945



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	127.5	3.2
10°-20°	364.1	9.1
20°-30°	548.0	13.6
30°-40°	656.7	16.3
40°-50°	684.3	17.0
50°-60°	636.7	15.9
60°-70°	524.4	13.1
70°-80°	357.1	8.9
80°-90°	117.9	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°	1039.6	25.9
0°-40°	1696.3	42.2
0°-60°	3017.3	75.1
0°-90°	4016.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4016.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1349	1349	1349	1349	1349	
5°	1343	1343	1338	1345	1346	127
15°	1284	1286	1287	1299	1300	362
25°	1169	1174	1186	1206	1210	538
35°	1014	1026	1047	1075	1086	633
45°	831	849	883	928	944	641
55°	635	657	712	768	787	566
65°	426	462	535	598	621	423
75°	221	271	353	416	436	233
85°	47	91	118	126	126	58
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1348.6	1348.6	1348.6	1348.6	1348.6
2.5°	1348.6	1348.6	1341.9	1348.6	1348.6
5°	1343.2	1343.2	1337.9	1344.6	1345.9
7.5°	1333.9	1335.2	1329.8	1337.9	1339.2
10°	1320.4	1321.8	1319.1	1327.1	1328.5
12.5°	1304.4	1305.7	1305.7	1315.1	1316.4
15°	1284.3	1285.6	1286.9	1299.0	1300.3
17.5°	1258.8	1262.8	1265.5	1280.2	1282.9
20°	1232.0	1236.0	1241.4	1257.4	1260.1
22.5°	1201.1	1206.5	1215.9	1233.3	1237.3
25°	1169.0	1174.3	1186.4	1206.5	1210.5
27.5°	1132.8	1140.8	1155.6	1177.0	1182.4
30°	1095.2	1103.3	1120.7	1143.5	1151.5
32.5°	1055.0	1065.7	1085.8	1111.3	1119.4
35°	1013.5	1025.5	1047.0	1075.1	1085.8
37.5°	969.2	982.6	1008.1	1038.9	1052.3
40°	923.6	939.7	966.5	1002.7	1017.5
42.5°	878.1	892.8	926.3	965.2	981.3
45°	831.1	848.6	883.4	927.7	943.8
47.5°	782.9	800.3	841.9	888.8	903.5
50°	734.6	752.1	799.0	848.6	866.0
52.5°	682.3	705.1	758.8	808.4	825.8
55°	635.4	656.9	711.8	768.1	786.9
57.5°	581.8	607.3	667.6	726.6	746.7
60°	532.2	559.0	623.4	683.7	703.8
62.5°	481.3	510.8	579.1	640.8	663.6
65°	426.3	462.5	534.9	597.9	620.7
67.5°	376.7	414.2	490.6	555.0	575.1
70°	320.4	366.0	443.7	508.1	530.9
72.5°	272.1	317.7	399.5	462.5	485.3
75°	221.2	270.8	352.6	415.6	435.7
77.5°	170.3	225.2	307.0	355.2	361.9
80°	122.0	179.6	254.7	282.9	292.2
82.5°	85.8	138.1	187.7	206.4	211.8
85°	46.9	91.2	118.0	126.0	126.0
87.5°	20.1	38.9	46.9	48.3	49.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)