

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: P275906

Luminaire Tested: **24CZ2-40HE-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275906  
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-L83050-W2A1-U-5000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4084.0 lumens  
Efficiency: N/A  
Efficacy: 137.7 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

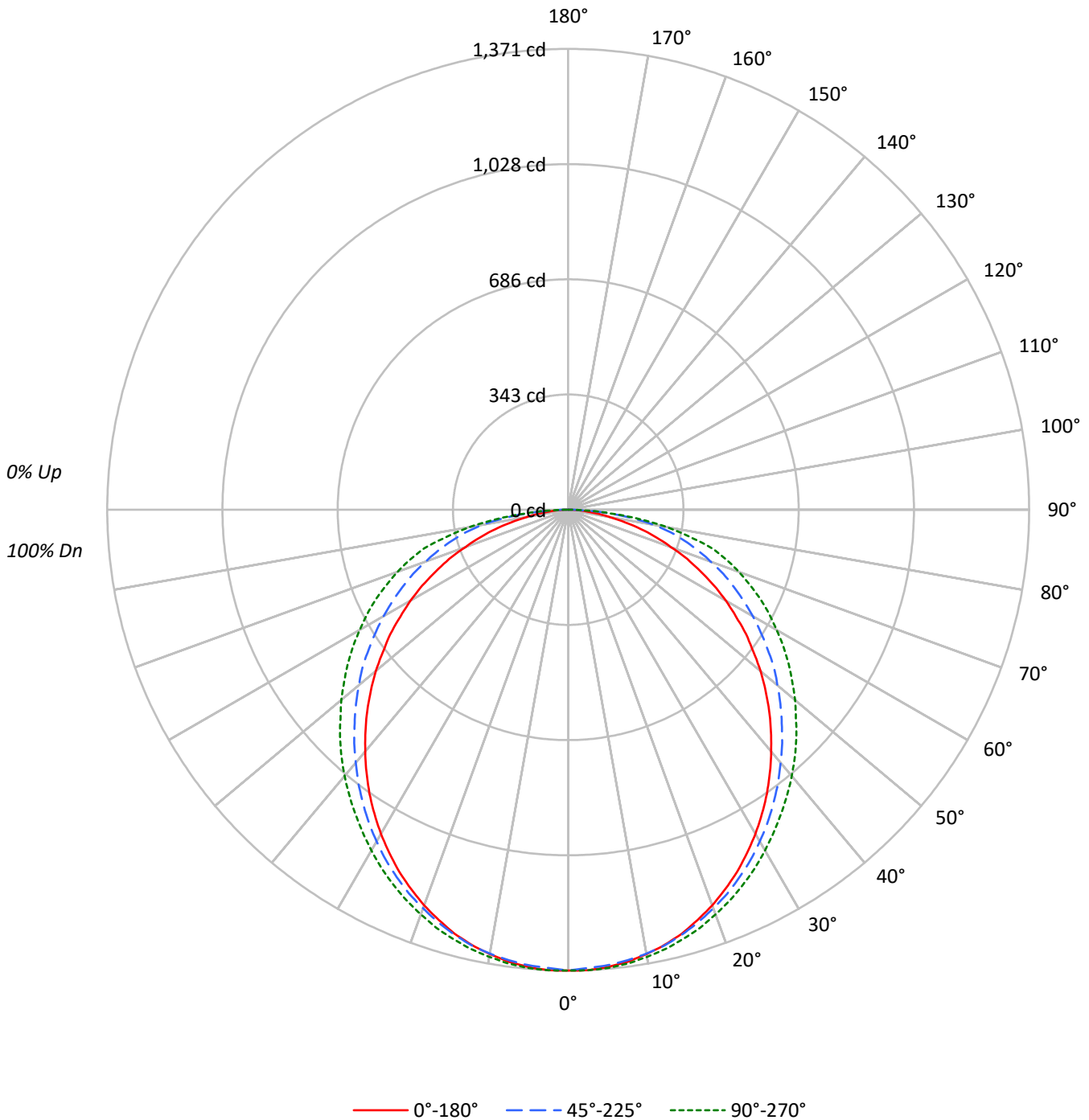
Input Watts (W): 29.667  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1845	1845	1845
5°	1845	1837	1848
10°	1834	1832	1845
15°	1819	1823	1842
20°	1794	1807	1834
25°	1764	1791	1827
30°	1730	1770	1819
35°	1692	1748	1813
40°	1649	1726	1817
45°	1608	1709	1826
50°	1563	1701	1843
55°	1516	1698	1877
60°	1456	1706	1926
65°	1380	1731	2009
70°	1282	1775	2124
75°	1169	1864	2303
80°	961	2007	2302
85°	736	1851	1978



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.7	3.2
10°-20°	370.2	9.1
20°-30°	557.1	13.6
30°-40°	667.7	16.3
40°-50°	695.8	17.0
50°-60°	647.3	15.9
60°-70°	533.2	13.1
70°-80°	363.1	8.9
80°-90°	119.9	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°	1057.1	25.9
0°-40°	1724.7	42.2
0°-60°	3067.8	75.1
0°-90°	4084.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4084.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1371	1371	1371	1371	1371	
5°	1366	1366	1360	1367	1368	130
15°	1306	1307	1308	1321	1322	368
25°	1188	1194	1206	1227	1231	547
35°	1030	1043	1064	1093	1104	644
45°	845	863	898	943	960	652
55°	646	668	724	781	800	576
65°	433	470	544	608	631	430
75°	225	275	358	422	443	237
85°	48	93	120	128	128	59
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1371.2	1371.2	1371.2	1371.2	1371.2
2.5°	1371.2	1371.2	1364.4	1371.2	1371.2
5°	1365.7	1365.7	1360.3	1367.1	1368.5
7.5°	1356.2	1357.6	1352.1	1360.3	1361.6
10°	1342.6	1343.9	1341.2	1349.4	1350.7
12.5°	1326.2	1327.6	1327.6	1337.1	1338.5
15°	1305.8	1307.1	1308.5	1320.8	1322.1
17.5°	1279.9	1284.0	1286.7	1301.7	1304.4
20°	1252.6	1256.7	1262.1	1278.5	1281.2
22.5°	1221.3	1226.7	1236.3	1254.0	1258.1
25°	1188.5	1194.0	1206.3	1226.7	1230.8
27.5°	1151.7	1159.9	1174.9	1196.7	1202.2
30°	1113.6	1121.8	1139.5	1162.6	1170.8
32.5°	1072.7	1083.6	1104.0	1129.9	1138.1
35°	1030.4	1042.7	1064.5	1093.1	1104.0
37.5°	985.5	999.1	1025.0	1056.3	1070.0
40°	939.1	955.5	982.7	1019.5	1034.5
42.5°	892.8	907.8	941.8	981.4	997.7
45°	845.1	862.8	898.2	943.2	959.6
47.5°	796.0	813.7	856.0	903.7	918.7
50°	746.9	764.6	812.4	862.8	880.5
52.5°	693.8	716.9	771.5	821.9	839.6
55°	646.1	667.9	723.8	781.0	800.1
57.5°	591.5	617.4	678.8	738.8	759.2
60°	541.1	568.4	633.8	695.1	715.6
62.5°	489.3	519.3	588.8	651.5	674.7
65°	433.4	470.2	543.8	607.9	631.1
67.5°	383.0	421.2	498.9	564.3	584.7
70°	325.8	372.1	451.2	516.6	539.8
72.5°	276.7	323.0	406.2	470.2	493.4
75°	224.9	275.3	358.5	422.5	443.0
77.5°	173.1	229.0	312.1	361.2	368.0
80°	124.0	182.6	259.0	287.6	297.1
82.5°	87.2	140.4	190.8	209.9	215.4
85°	47.7	92.7	119.9	128.1	128.1
87.5°	20.4	39.5	47.7	49.1	50.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)