

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: P276694

Luminaire Tested: **24CZ2-30-S-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P276694
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: 24CZ2-30-S-UNV-L92765-W2A1-U-5700K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2841.8 lumens
Efficiency: N/A
Efficacy: 126.8 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

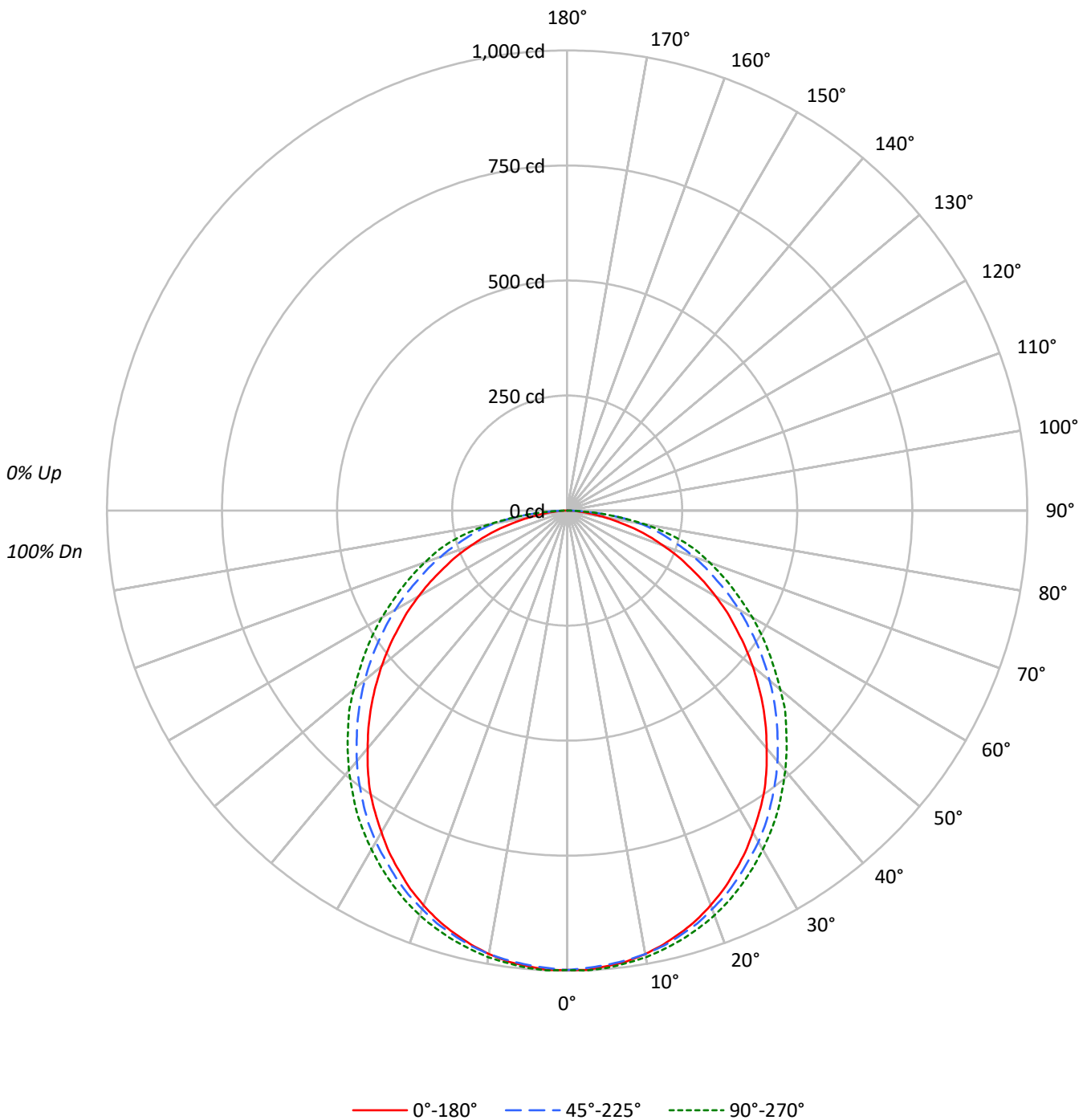
Input Watts (W): 22.413
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1343	1343	1343
5°	1342	1339	1347
10°	1337	1337	1347
15°	1324	1330	1344
20°	1307	1320	1340
25°	1283	1307	1332
30°	1254	1292	1321
35°	1226	1271	1311
40°	1184	1249	1295
45°	1146	1225	1281
50°	1102	1202	1266
55°	1052	1179	1254
60°	1003	1161	1251
65°	940	1141	1259
70°	870	1147	1293
75°	779	1169	1366
80°	629	1238	1336
85°	474	1087	1059



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.5	3.3
10°-20°	270.1	9.5
20°-30°	406.0	14.3
30°-40°	483.6	17.0
40°-50°	494.9	17.4
50°-60°	445.6	15.7
60°-70°	349.9	12.3
70°-80°	227.1	8.0
80°-90°	70.2	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°	770.5	27.1
0°-40°	1254.1	44.1
0°-60°	2194.6	77.2
0°-90°	2841.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2841.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	998	998	998	998	998	
5°	994	996	991	996	998	94
15°	950	953	955	963	965	268
25°	864	871	880	894	897	398
35°	746	756	774	792	798	466
45°	602	616	644	668	673	464
55°	449	468	503	529	534	402
65°	295	318	358	388	395	294
75°	150	179	225	256	263	159
85°	31	57	70	69	69	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	998.4	998.4	998.4	998.4	998.4
2.5°	999.3	999.3	994.7	999.3	1000.2
5°	993.8	995.6	991.1	996.5	997.5
7.5°	988.4	988.4	985.7	991.1	992.0
10°	978.5	979.4	978.5	984.8	985.7
12.5°	965.9	967.7	968.6	974.9	975.8
15°	950.5	953.2	955.0	963.1	965.0
17.5°	933.4	936.1	940.6	949.6	951.4
20°	912.6	916.2	921.6	933.4	936.1
22.5°	890.0	893.6	902.7	913.5	918.0
25°	863.9	871.1	880.1	894.5	897.3
27.5°	837.7	844.0	855.7	871.1	874.7
30°	807.0	816.9	831.4	846.7	850.3
32.5°	777.2	787.1	804.3	820.5	825.0
35°	746.5	755.5	773.6	792.5	798.0
37.5°	711.3	723.0	742.9	761.9	767.3
40°	674.3	688.7	711.3	731.2	737.5
42.5°	639.1	654.4	677.0	698.7	705.9
45°	602.1	616.5	643.6	668.0	673.4
47.5°	564.2	580.4	609.3	633.7	642.7
50°	526.3	543.4	574.1	599.4	604.8
52.5°	488.3	506.4	538.9	566.0	568.7
55°	448.6	468.5	502.8	529.0	534.4
57.5°	412.5	429.7	466.7	493.8	500.1
60°	372.8	391.8	431.5	456.8	464.9
62.5°	334.9	354.7	396.3	421.5	428.8
65°	295.2	317.7	358.4	388.1	395.4
67.5°	260.9	282.5	325.9	354.7	362.0
70°	221.2	245.5	291.6	321.4	328.6
72.5°	186.9	212.1	258.2	287.0	297.9
75°	149.8	178.7	224.8	255.5	262.7
77.5°	113.7	147.1	194.1	217.5	217.5
80°	81.2	116.4	159.8	170.6	172.4
82.5°	53.3	87.6	118.2	117.3	117.3
85°	30.7	56.9	70.4	68.6	68.6
87.5°	11.7	23.5	25.3	25.3	24.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)