

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: P275441

Luminaire Tested: **14CZ2-39-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P275441
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-39-UNV-L93050-W2A1-U-4500K
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3593.0 lumens
Efficiency: N/A
Efficacy: 111.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

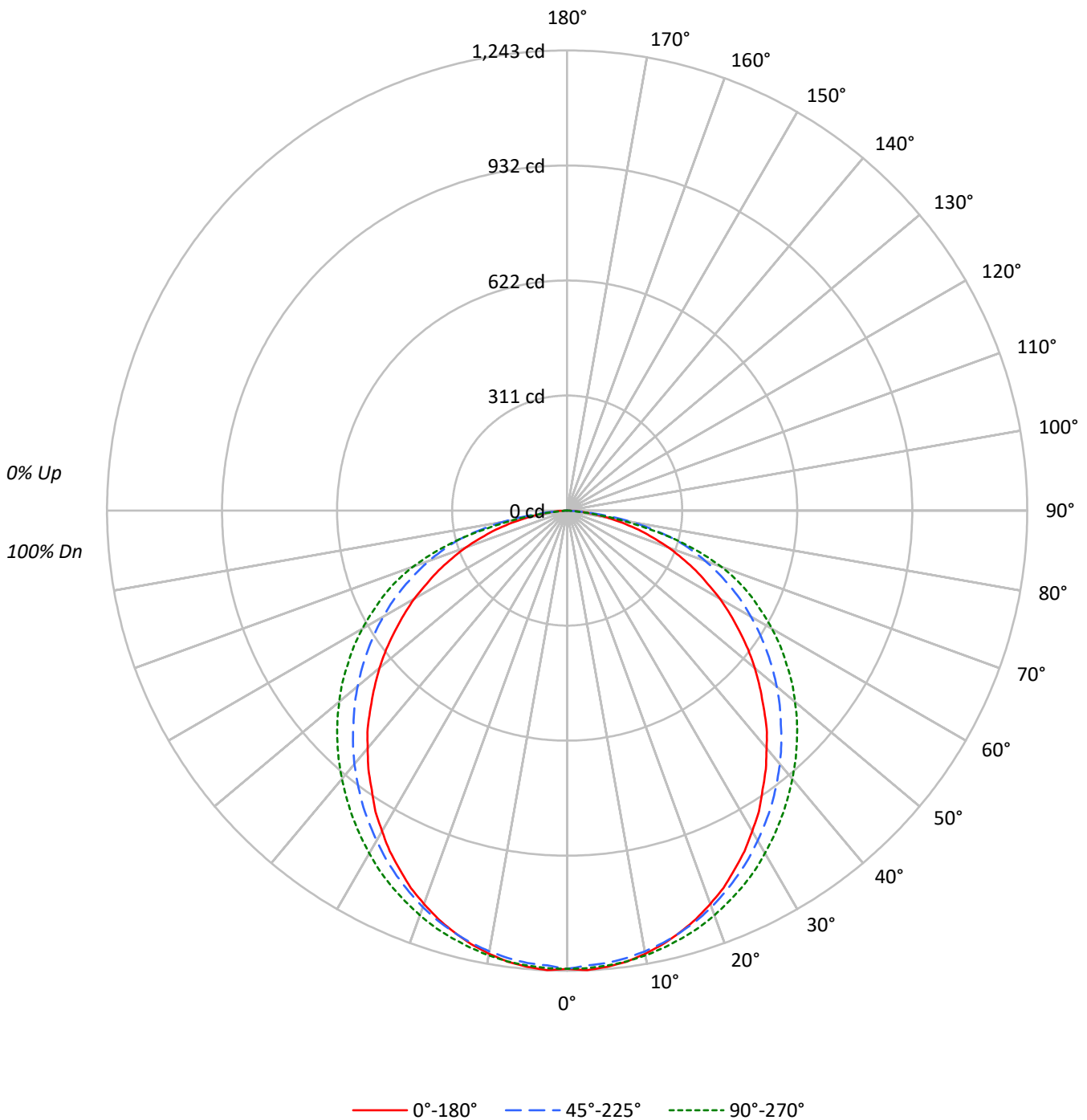
Input Watts (W): 32.271
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	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	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3331	3331	3331
5°	3341	3313	3333
10°	3321	3304	3334
15°	3285	3288	3332
20°	3237	3265	3331
25°	3176	3233	3328
30°	3107	3199	3321
35°	3024	3171	3319
40°	2944	3141	3324
45°	2854	3107	3342
50°	2771	3093	3364
55°	2665	3082	3394
60°	2570	3087	3441
65°	2439	3096	3494
70°	2288	3120	3492
75°	2074	3148	3157
80°	1702	2720	2247
85°	1263	1288	519



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.1	3.3
10°-20°	334.6	9.3
20°-30°	504.0	14.0
30°-40°	604.8	16.8
40°-50°	630.4	17.5
50°-60°	583.6	16.2
60°-70°	471.5	13.1
70°-80°	287.5	8.0
80°-90°	59.4	1.7
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°	955.7	26.6
0°-40°	1560.6	43.4
0°-60°	2774.6	77.2
0°-90°	3593.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3593.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1238	1238	1238	1238	1238	
5°	1237	1234	1227	1235	1234	117
15°	1179	1180	1180	1196	1196	332
25°	1070	1076	1089	1116	1121	493
35°	920	935	965	1001	1010	577
45°	750	772	816	862	878	580
55°	568	598	657	708	724	509
65°	383	421	486	535	549	379
75°	200	244	303	308	304	210
85°	41	61	42	23	17	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1237.8	1237.8	1237.8	1237.8	1237.8
2.5°	1242.6	1238.6	1229.8	1238.6	1237.0
5°	1237.0	1233.8	1226.6	1235.4	1233.8
7.5°	1229.0	1225.8	1219.4	1229.8	1228.2
10°	1215.4	1213.8	1209.0	1221.0	1220.2
12.5°	1199.3	1198.5	1196.1	1209.8	1209.0
15°	1179.3	1180.1	1180.1	1196.1	1196.1
17.5°	1156.9	1158.5	1161.7	1179.3	1181.7
20°	1130.4	1133.6	1140.1	1160.1	1163.3
22.5°	1103.2	1105.6	1115.2	1139.3	1142.5
25°	1069.6	1076.0	1088.8	1116.0	1120.8
27.5°	1037.5	1043.1	1060.7	1088.8	1096.8
30°	999.9	1008.7	1029.5	1059.9	1068.8
32.5°	963.8	973.4	997.5	1032.7	1040.7
35°	920.5	935.0	965.4	1000.7	1010.3
37.5°	881.3	894.9	929.4	967.8	979.0
40°	838.0	854.8	894.1	935.0	946.2
42.5°	798.0	814.0	856.4	898.1	913.3
45°	749.9	772.3	816.4	862.1	878.1
47.5°	705.8	728.3	778.7	827.6	842.0
50°	661.8	685.8	738.7	789.1	803.6
52.5°	616.1	641.7	698.6	749.1	765.9
55°	568.0	597.7	657.0	708.2	723.5
57.5°	522.4	552.8	616.1	668.2	683.4
60°	477.5	508.7	573.6	623.3	639.3
62.5°	427.8	464.7	532.0	580.8	592.9
65°	383.0	420.6	486.3	535.2	548.8
67.5°	335.7	376.5	442.2	487.1	499.9
70°	290.8	333.3	396.6	438.2	443.8
72.5°	242.8	286.0	350.1	376.5	376.5
75°	199.5	243.6	302.8	307.6	303.6
77.5°	152.2	201.1	239.5	229.9	220.3
80°	109.8	157.8	175.5	157.8	145.0
82.5°	73.7	114.6	105.8	84.1	74.5
85°	40.9	60.9	41.7	23.2	16.8
87.5°	15.2	13.6	4.0	4.0	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)