

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: P275712

Luminaire Tested: **14CZ2-39-S-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275712  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-39-S-UNV-L92765-W2A1-U-5500K  
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3649.0 lumens  
Efficiency: N/A  
Efficacy: 114.7 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

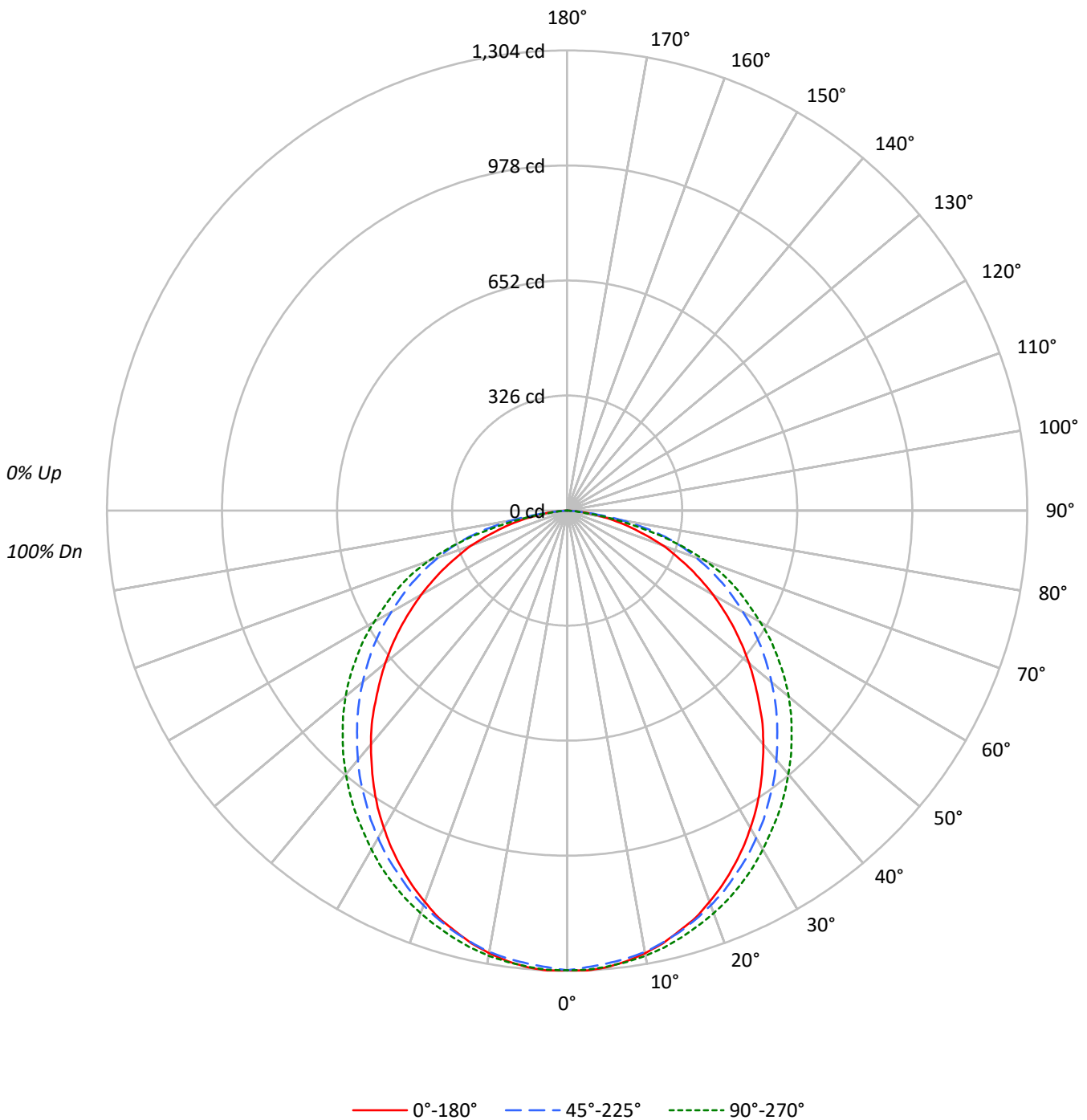
Input Watts (W): 31.806  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84					84			
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70					70			
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58					58			
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50					50			
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43					43			
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38					38			
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27					27			
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3505	3505	3505
5°	3509	3480	3504
10°	3480	3471	3500
15°	3433	3443	3488
20°	3378	3409	3477
25°	3309	3368	3465
30°	3227	3328	3446
35°	3138	3281	3435
40°	3038	3241	3426
45°	2926	3202	3422
50°	2817	3166	3431
55°	2699	3141	3421
60°	2570	3096	3398
65°	2419	3088	3398
70°	2278	3061	3302
75°	1975	2991	2822
80°	1598	2411	1878
85°	1062	837	559



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.0	3.4
10°-20°	350.0	9.6
20°-30°	525.0	14.4
30°-40°	626.3	17.2
40°-50°	647.5	17.7
50°-60°	591.2	16.2
60°-70°	465.2	12.7
70°-80°	270.8	7.4
80°-90°	49.9	1.4
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°	998.1	27.4
0°-40°	1624.4	44.5
0°-60°	2863.1	78.5
0°-90°	3649.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3649.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1303	1303	1303	1303	1303	
5°	1299	1295	1288	1299	1297	123
15°	1232	1234	1236	1252	1252	348
25°	1114	1120	1134	1162	1167	513
35°	955	968	999	1037	1046	597
45°	769	794	841	888	899	594
55°	575	606	669	718	729	514
65°	380	420	485	523	534	377
75°	190	235	288	282	271	202
85°	34	49	27	22	18	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1302.6	1302.6	1302.6	1302.6	1302.6
2.5°	1304.4	1300.8	1295.4	1304.4	1302.6
5°	1299.0	1295.4	1288.2	1299.0	1297.2
7.5°	1288.2	1284.5	1280.9	1291.8	1290.0
10°	1273.7	1271.9	1270.1	1282.7	1280.9
12.5°	1255.6	1255.6	1253.8	1268.3	1268.3
15°	1232.1	1233.9	1235.7	1252.0	1252.0
17.5°	1210.4	1208.6	1214.0	1232.1	1233.9
20°	1179.6	1183.2	1190.5	1212.2	1214.0
22.5°	1148.8	1152.5	1165.1	1186.8	1192.3
25°	1114.5	1119.9	1134.4	1161.5	1166.9
27.5°	1078.3	1085.5	1105.4	1134.4	1139.8
30°	1038.5	1049.3	1071.1	1103.6	1109.0
32.5°	998.7	1009.5	1036.7	1069.2	1076.5
35°	955.3	967.9	998.7	1036.7	1045.7
37.5°	910.0	926.3	962.5	1000.5	1011.3
40°	864.8	882.9	922.7	962.5	975.2
42.5°	819.6	837.7	881.1	926.3	939.0
45°	768.9	794.2	841.3	888.3	899.2
47.5°	720.1	747.2	799.7	846.7	861.2
50°	673.0	700.2	756.3	805.1	819.6
52.5°	624.2	653.1	712.8	763.5	776.2
55°	575.3	606.1	669.4	718.3	729.1
57.5°	526.5	559.0	624.2	671.2	683.9
60°	477.6	512.0	575.3	622.4	631.4
62.5°	428.8	465.0	530.1	571.7	580.8
65°	379.9	419.7	484.9	522.9	533.7
67.5°	332.9	372.7	436.0	472.2	481.3
70°	289.5	325.7	389.0	416.1	419.7
72.5°	235.2	280.4	341.9	356.4	347.4
75°	190.0	235.2	287.7	282.2	271.4
77.5°	144.7	190.0	224.3	206.3	191.8
80°	103.1	148.4	155.6	128.5	121.2
82.5°	66.9	103.1	86.8	66.9	54.3
85°	34.4	48.8	27.1	21.7	18.1
87.5°	10.9	7.2	3.6	3.6	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)