

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: P275710

Luminaire Tested: **14CZ2-39-S-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275710  
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-4500K  
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3522.0 lumens  
Efficiency: N/A  
Efficacy: 111.7 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

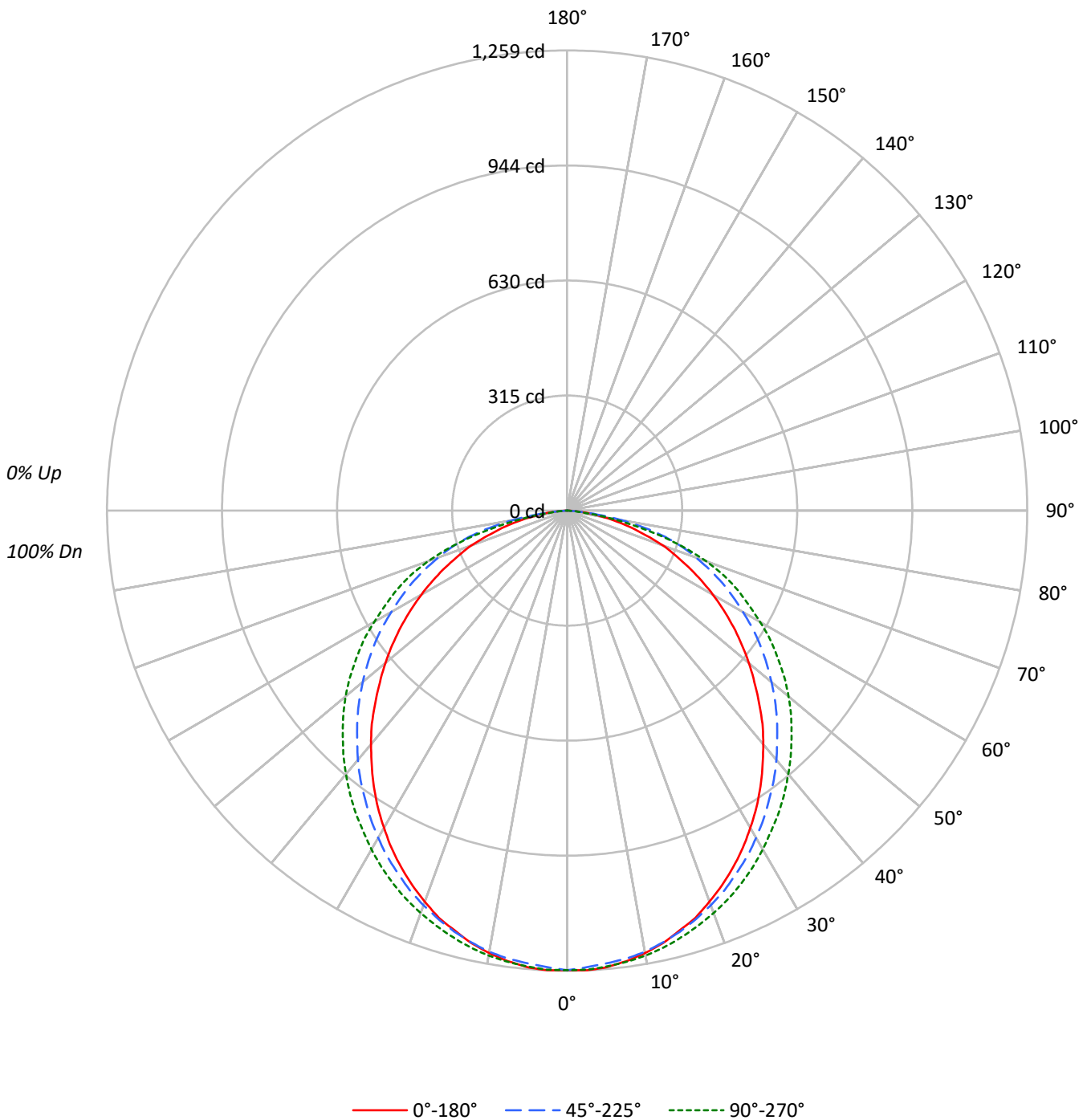
Input Watts (W): 31.527  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	3383	3383	3383
5°	3387	3358	3382
10°	3359	3350	3378
15°	3313	3323	3366
20°	3261	3290	3355
25°	3194	3251	3344
30°	3114	3212	3326
35°	3029	3166	3316
40°	2932	3129	3306
45°	2825	3090	3303
50°	2719	3056	3311
55°	2605	3031	3301
60°	2481	2989	3280
65°	2335	2980	3280
70°	2198	2954	3187
75°	1907	2887	2723
80°	1542	2328	1813
85°	1025	809	540



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	118.7	3.4
10°-20°	337.8	9.6
20°-30°	506.8	14.4
30°-40°	604.5	17.2
40°-50°	625.0	17.7
50°-60°	570.6	16.2
60°-70°	449.0	12.7
70°-80°	261.4	7.4
80°-90°	48.2	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°	963.3	27.4
0°-40°	1567.9	44.5
0°-60°	2763.4	78.5
0°-90°	3522.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3522.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1257	1257	1257	1257	1257	
5°	1254	1250	1243	1254	1252	119
15°	1189	1191	1193	1208	1208	336
25°	1076	1081	1095	1121	1126	495
35°	922	934	964	1001	1009	576
45°	742	767	812	857	868	573
55°	555	585	646	693	704	497
65°	367	405	468	505	515	364
75°	183	227	278	272	262	195
85°	33	47	26	21	18	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1257.3	1257.3	1257.3	1257.3	1257.3
2.5°	1259.0	1255.5	1250.3	1259.0	1257.3
5°	1253.8	1250.3	1243.3	1253.8	1252.1
7.5°	1243.3	1239.8	1236.3	1246.8	1245.1
10°	1229.4	1227.6	1225.9	1238.1	1236.3
12.5°	1211.9	1211.9	1210.1	1224.1	1224.1
15°	1189.2	1190.9	1192.7	1208.4	1208.4
17.5°	1168.2	1166.5	1171.7	1189.2	1190.9
20°	1138.6	1142.0	1149.0	1170.0	1171.7
22.5°	1108.9	1112.4	1124.6	1145.5	1150.8
25°	1075.7	1080.9	1094.9	1121.1	1126.3
27.5°	1040.8	1047.7	1067.0	1094.9	1100.1
30°	1002.3	1012.8	1033.8	1065.2	1070.4
32.5°	963.9	974.4	1000.6	1032.0	1039.0
35°	922.0	934.2	963.9	1000.6	1009.3
37.5°	878.4	894.1	929.0	965.7	976.2
40°	834.7	852.2	890.6	929.0	941.2
42.5°	791.0	808.5	850.4	894.1	906.3
45°	742.2	766.6	812.0	857.4	867.9
47.5°	695.0	721.2	771.8	817.2	831.2
50°	649.6	675.8	729.9	777.1	791.0
52.5°	602.5	630.4	688.0	736.9	749.1
55°	555.3	585.0	646.1	693.3	703.7
57.5°	508.2	539.6	602.5	647.9	660.1
60°	461.0	494.2	555.3	600.7	609.4
62.5°	413.9	448.8	511.6	551.8	560.5
65°	366.7	405.1	468.0	504.7	515.1
67.5°	321.3	359.7	420.8	455.8	464.5
70°	279.4	314.3	375.4	401.6	405.1
72.5°	227.0	270.7	330.0	344.0	335.3
75°	183.4	227.0	277.7	272.4	261.9
77.5°	139.7	183.4	216.5	199.1	185.1
80°	99.5	143.2	150.2	124.0	117.0
82.5°	64.6	99.5	83.8	64.6	52.4
85°	33.2	47.1	26.2	21.0	17.5
87.5°	10.5	7.0	3.5	3.5	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)