

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: P275487

Luminaire Tested: **14CZ2-39-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275487  
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-L82765-W2A1-U-4000K  
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3839.0 lumens  
Efficiency: N/A  
Efficacy: 122.5 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

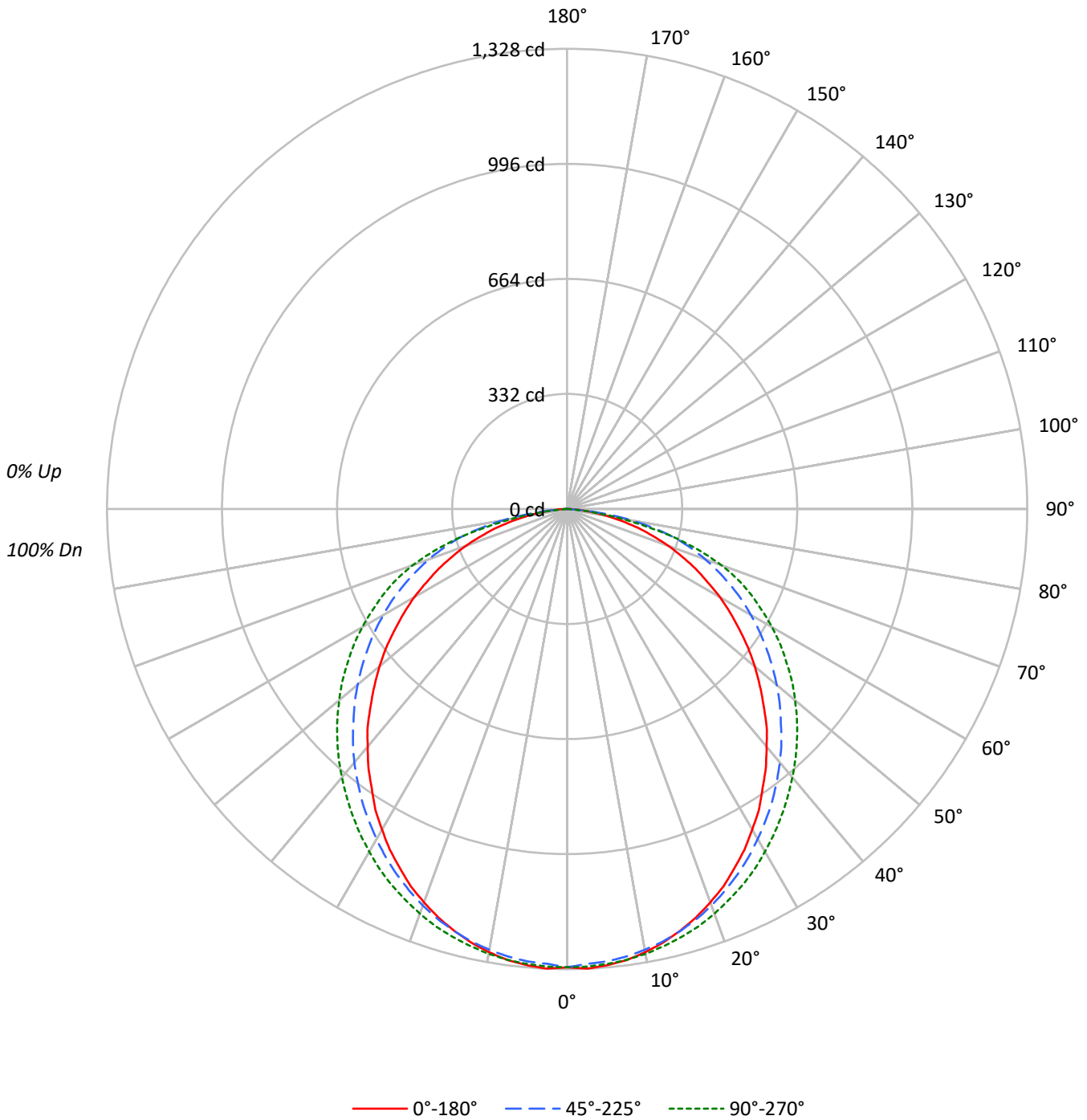
Input Watts (W): 31.341  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32					32			
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29					29			
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24					24			

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

	0°	45°	90°
0°	3559	3559	3559
5°	3570	3540	3561
10°	3548	3530	3562
15°	3511	3513	3560
20°	3459	3488	3559
25°	3393	3454	3556
30°	3320	3418	3548
35°	3231	3389	3546
40°	3145	3356	3551
45°	3049	3320	3570
50°	2960	3304	3594
55°	2847	3293	3627
60°	2746	3299	3676
65°	2606	3309	3734
70°	2445	3334	3731
75°	2216	3365	3373
80°	1818	2906	2400
85°	1349	1374	556



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.1	3.3
10°-20°	357.5	9.3
20°-30°	538.5	14.0
30°-40°	646.3	16.8
40°-50°	673.6	17.5
50°-60°	623.6	16.2
60°-70°	503.8	13.1
70°-80°	307.2	8.0
80°-90°	63.4	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°	1021.2	26.6
0°-40°	1667.4	43.4
0°-60°	2964.6	77.2
0°-90°	3839.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3839.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1322	1322	1322	1322	1322	
5°	1322	1318	1311	1320	1318	125
15°	1260	1261	1261	1278	1278	355
25°	1143	1150	1163	1192	1198	527
35°	984	999	1032	1069	1079	616
45°	801	825	872	921	938	619
55°	607	639	702	757	773	544
65°	409	449	520	572	586	405
75°	213	260	324	329	324	224
85°	44	65	44	25	18	54
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1322.5	1322.5	1322.5	1322.5	1322.5
2.5°	1327.7	1323.4	1314.0	1323.4	1321.7
5°	1321.7	1318.3	1310.6	1320.0	1318.3
7.5°	1313.1	1309.7	1302.9	1314.0	1312.3
10°	1298.6	1296.9	1291.7	1304.6	1303.7
12.5°	1281.5	1280.6	1278.0	1292.6	1291.7
15°	1260.1	1260.9	1260.9	1278.0	1278.0
17.5°	1236.1	1237.8	1241.2	1260.1	1262.6
20°	1207.8	1211.3	1218.1	1239.5	1242.9
22.5°	1178.7	1181.3	1191.6	1217.3	1220.7
25°	1142.8	1149.6	1163.3	1192.4	1197.6
27.5°	1108.5	1114.5	1133.4	1163.3	1171.9
30°	1068.3	1077.7	1100.0	1132.5	1141.9
32.5°	1029.8	1040.1	1065.7	1103.4	1112.0
35°	983.6	999.0	1031.5	1069.2	1079.4
37.5°	941.6	956.2	993.0	1034.1	1046.1
40°	895.4	913.4	955.3	999.0	1011.0
42.5°	852.6	869.7	915.1	959.6	975.9
45°	801.2	825.2	872.3	921.1	938.2
47.5°	754.2	778.1	832.0	884.3	899.7
50°	707.1	732.8	789.2	843.2	858.6
52.5°	658.3	685.7	746.4	800.4	818.4
55°	606.9	638.6	701.9	756.7	773.0
57.5°	558.1	590.7	658.3	713.9	730.2
60°	510.2	543.6	612.9	666.0	683.1
62.5°	457.1	496.5	568.4	620.6	633.5
65°	409.2	449.4	519.6	571.8	586.4
67.5°	358.7	402.3	472.5	520.5	534.2
70°	310.7	356.1	423.7	468.2	474.2
72.5°	259.4	305.6	374.1	402.3	402.3
75°	213.1	260.2	323.6	328.7	324.4
77.5°	162.6	214.9	255.9	245.7	235.4
80°	117.3	168.6	187.5	168.6	154.9
82.5°	78.8	122.4	113.0	89.9	79.6
85°	43.7	65.1	44.5	24.8	18.0
87.5°	16.3	14.6	4.3	4.3	4.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)