

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: P275438

Luminaire Tested: **14CZ2-39-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275438  
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-3000K  
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2992.0 lumens  
Efficiency: N/A  
Efficacy: 94.3 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

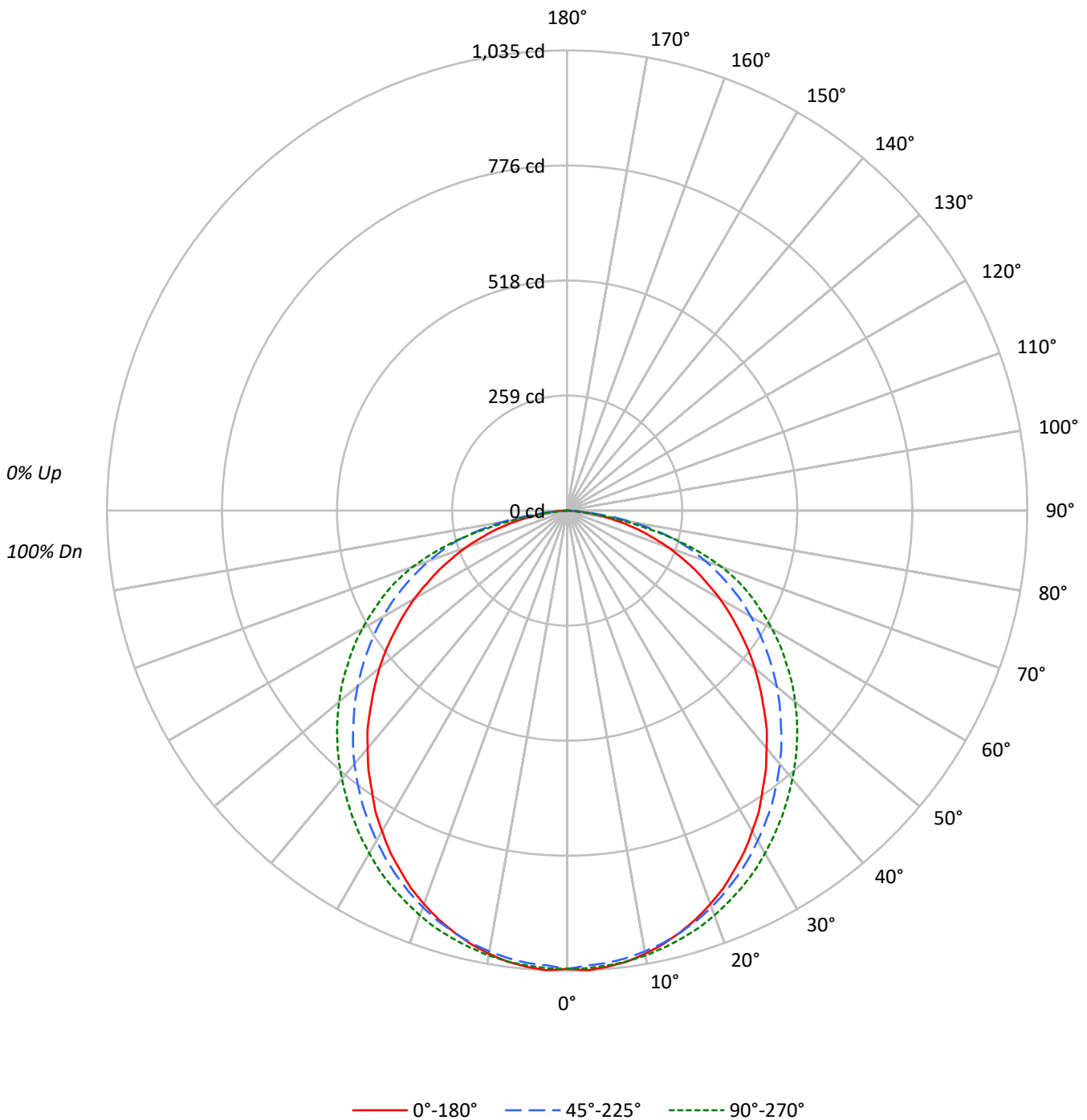
Input Watts (W): 31.713  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2774	2774	2774
5°	2783	2759	2775
10°	2766	2751	2776
15°	2736	2738	2775
20°	2696	2719	2774
25°	2645	2692	2771
30°	2587	2664	2765
35°	2518	2641	2764
40°	2451	2615	2768
45°	2377	2587	2783
50°	2307	2575	2802
55°	2219	2567	2826
60°	2140	2571	2865
65°	2031	2579	2910
70°	1906	2598	2908
75°	1727	2622	2629
80°	1416	2264	1872
85°	1050	1071	432



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.5	3.3
10°-20°	278.6	9.3
20°-30°	419.7	14.0
30°-40°	503.7	16.8
40°-50°	525.0	17.5
50°-60°	486.0	16.2
60°-70°	392.7	13.1
70°-80°	239.4	8.0
80°-90°	49.4	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°	795.9	26.6
0°-40°	1299.5	43.4
0°-60°	2310.5	77.2
0°-90°	2992.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2992.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1031	1031	1031	1031	1031	
5°	1030	1027	1021	1029	1027	98
15°	982	983	983	996	996	277
25°	891	896	907	929	933	411
35°	767	779	804	833	841	480
45°	624	643	680	718	731	483
55°	473	498	547	590	602	424
65°	319	350	405	446	457	315
75°	166	203	252	256	253	174
85°	34	51	35	19	14	42
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1030.8	1030.8	1030.8	1030.8	1030.8
2.5°	1034.8	1031.4	1024.1	1031.4	1030.1
5°	1030.1	1027.4	1021.4	1028.8	1027.4
7.5°	1023.4	1020.7	1015.4	1024.1	1022.7
10°	1012.1	1010.7	1006.7	1016.7	1016.1
12.5°	998.7	998.1	996.1	1007.4	1006.7
15°	982.1	982.7	982.7	996.1	996.1
17.5°	963.4	964.7	967.4	982.1	984.1
20°	941.4	944.0	949.4	966.0	968.7
22.5°	918.7	920.7	928.7	948.7	951.4
25°	890.7	896.0	906.7	929.3	933.3
27.5°	864.0	868.6	883.3	906.7	913.3
30°	832.6	839.9	857.3	882.6	890.0
32.5°	802.6	810.6	830.6	860.0	866.6
35°	766.6	778.6	803.9	833.3	841.3
37.5°	733.9	745.2	773.9	805.9	815.3
40°	697.8	711.9	744.5	778.6	787.9
42.5°	664.5	677.8	713.2	747.9	760.6
45°	624.5	643.1	679.8	717.9	731.2
47.5°	587.8	606.4	648.5	689.2	701.2
50°	551.1	571.1	615.1	657.1	669.2
52.5°	513.0	534.4	581.8	623.8	637.8
55°	473.0	497.7	547.1	589.8	602.4
57.5°	435.0	460.3	513.0	556.4	569.1
60°	397.6	423.6	477.7	519.0	532.4
62.5°	356.3	386.9	443.0	483.7	493.7
65°	318.9	350.3	405.0	445.7	457.0
67.5°	279.5	313.6	368.3	405.6	416.3
70°	242.2	277.5	330.2	364.9	369.6
72.5°	202.1	238.2	291.5	313.6	313.6
75°	166.1	202.8	252.2	256.2	252.9
77.5°	126.8	167.5	199.5	191.5	183.5
80°	91.4	131.4	146.1	131.4	120.8
82.5°	61.4	95.4	88.1	70.1	62.0
85°	34.0	50.7	34.7	19.3	14.0
87.5°	12.7	11.3	3.3	3.3	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)