

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: P275581

Luminaire Tested: **14CZ2-44-S-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275581  
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: 14CZ2-44-S-UNV-L83050-W2A1-U-3000K  
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4106.0 lumens  
Efficiency: N/A  
Efficacy: 115.6 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

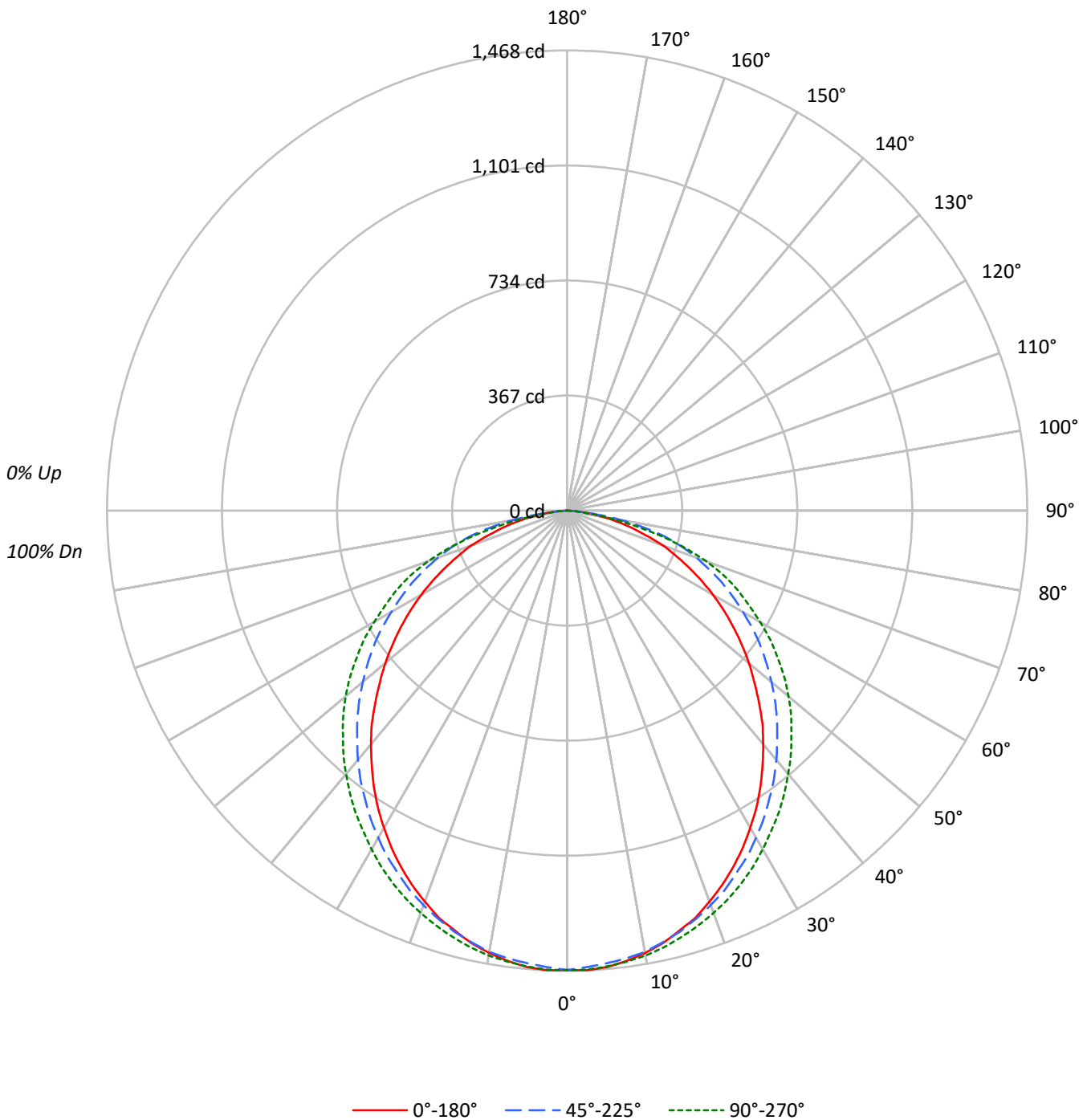
Input Watts (W): 35.526  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	3944	3944	3944
5°	3948	3915	3943
10°	3916	3905	3938
15°	3862	3874	3925
20°	3801	3836	3912
25°	3724	3790	3899
30°	3631	3745	3878
35°	3531	3692	3866
40°	3418	3647	3855
45°	3293	3602	3851
50°	3170	3563	3861
55°	3037	3534	3849
60°	2893	3484	3824
65°	2722	3474	3824
70°	2563	3444	3716
75°	2223	3366	3175
80°	1798	2713	2114
85°	1195	942	630



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	138.4	3.4
10°-20°	393.9	9.6
20°-30°	590.8	14.4
30°-40°	704.8	17.2
40°-50°	728.6	17.7
50°-60°	665.2	16.2
60°-70°	523.5	12.7
70°-80°	304.7	7.4
80°-90°	56.1	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°	1123.1	27.4
0°-40°	1827.8	44.5
0°-60°	3221.6	78.5
0°-90°	4106.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4106.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1466	1466	1466	1466	1466	
5°	1462	1458	1450	1462	1460	139
15°	1386	1388	1390	1409	1409	391
25°	1254	1260	1276	1307	1313	577
35°	1075	1089	1124	1166	1177	672
45°	865	894	947	1000	1012	668
55°	647	682	753	808	820	579
65°	428	472	546	588	601	425
75°	214	265	324	318	305	227
85°	39	55	30	24	20	50
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1465.8	1465.8	1465.8	1465.8	1465.8
2.5°	1467.8	1463.7	1457.6	1467.8	1465.8
5°	1461.7	1457.6	1449.5	1461.7	1459.7
7.5°	1449.5	1445.4	1441.3	1453.6	1451.5
10°	1433.2	1431.2	1429.1	1443.4	1441.3
12.5°	1412.8	1412.8	1410.8	1427.1	1427.1
15°	1386.4	1388.4	1390.4	1408.8	1408.8
17.5°	1361.9	1359.9	1366.0	1386.4	1388.4
20°	1327.3	1331.4	1339.6	1364.0	1366.0
22.5°	1292.7	1296.8	1311.1	1335.5	1341.6
25°	1254.1	1260.2	1276.4	1307.0	1313.1
27.5°	1213.3	1221.5	1243.9	1276.4	1282.6
30°	1168.5	1180.8	1205.2	1241.8	1247.9
32.5°	1123.8	1136.0	1166.5	1203.2	1211.3
35°	1074.9	1089.2	1123.8	1166.5	1176.7
37.5°	1024.0	1042.3	1083.0	1125.8	1138.0
40°	973.1	993.5	1038.3	1083.0	1097.3
42.5°	922.2	942.6	991.4	1042.3	1056.6
45°	865.2	893.7	946.6	999.6	1011.8
47.5°	810.2	840.8	899.8	952.8	969.0
50°	757.3	787.9	851.0	905.9	922.2
52.5°	702.3	734.9	802.1	859.1	873.4
55°	647.4	682.0	753.2	808.2	820.4
57.5°	592.4	629.1	702.3	755.3	769.5
60°	537.5	576.1	647.4	700.3	710.5
62.5°	482.5	523.2	596.5	643.3	653.5
65°	427.5	472.3	545.6	588.3	600.6
67.5°	374.6	419.4	490.6	531.3	541.5
70°	325.7	366.4	437.7	468.2	472.3
72.5°	264.7	315.5	384.8	401.1	390.9
75°	213.8	264.7	323.7	317.6	305.4
77.5°	162.9	213.8	252.4	232.1	215.8
80°	116.0	166.9	175.1	144.5	136.4
82.5°	75.3	116.0	97.7	75.3	61.1
85°	38.7	55.0	30.5	24.4	20.4
87.5°	12.2	8.1	4.1	4.1	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)