

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: P259304

Luminaire Tested: **22CZ-LD5-39-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259304  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25706)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ-LD5-39-UNV-L82765-W2A1-U-2700K  
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3614.0 lumens  
Efficiency: N/A  
Efficacy: 119.9 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

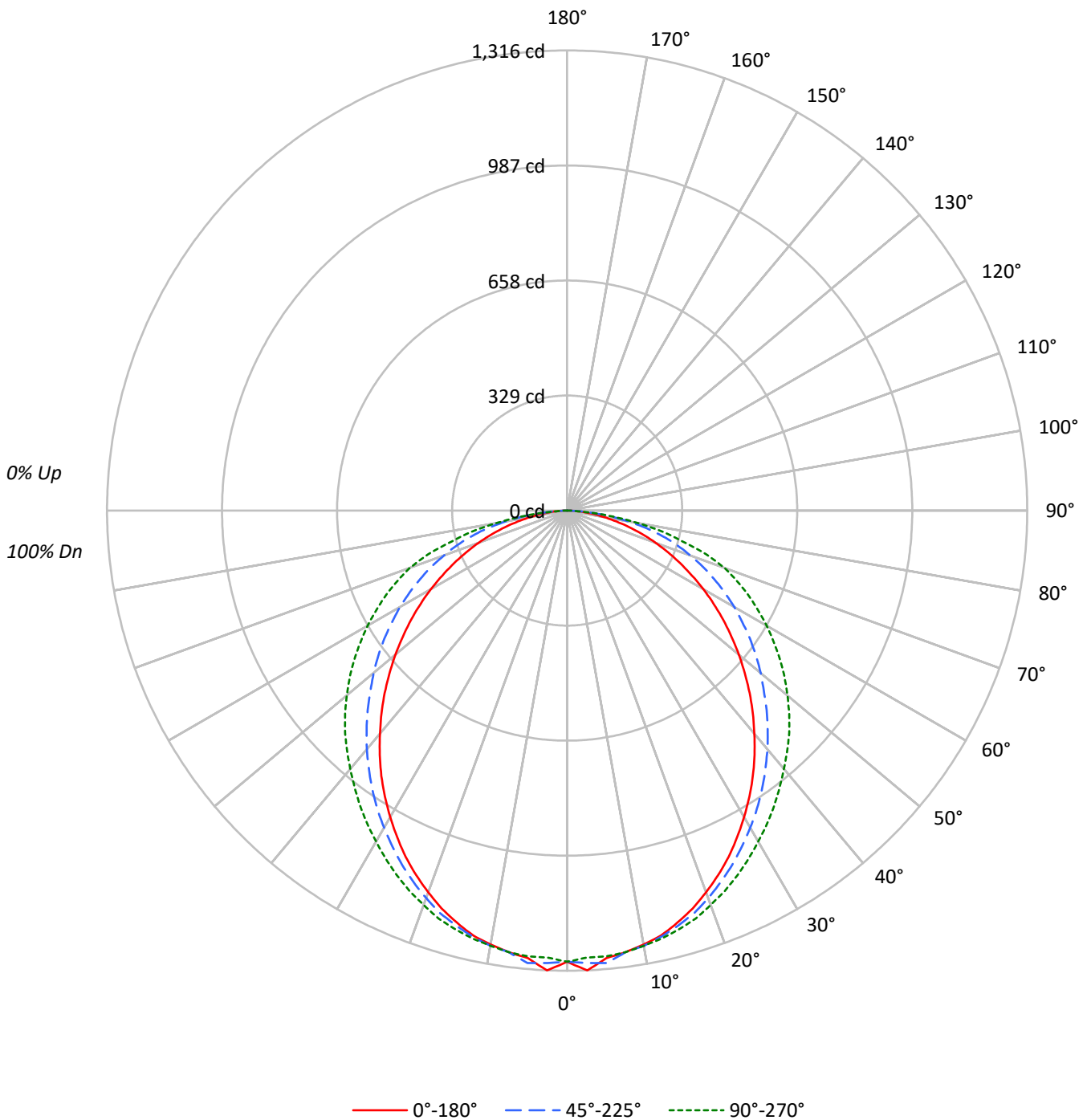
Input Watts (W): 30.132  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	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	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33					33			
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

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

	0°	45°	90°
0°	3471	3471	3471
5°	3470	3508	3456
10°	3443	3453	3453
15°	3398	3422	3452
20°	3327	3377	3437
25°	3246	3319	3418
30°	3145	3255	3397
35°	3043	3193	3389
40°	2926	3130	3389
45°	2809	3070	3418
50°	2686	3024	3443
55°	2556	2993	3488
60°	2421	2970	3547
65°	2272	2954	3637
70°	2116	2945	3761
75°	1918	2941	3563
80°	1661	2723	3160
85°	1411	2062	2007



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.3	3.4
10°-20°	346.6	9.6
20°-30°	515.5	14.3
30°-40°	609.7	16.9
40°-50°	626.7	17.3
50°-60°	572.6	15.8
60°-70°	458.1	12.7
70°-80°	287.5	8.0
80°-90°	74.9	2.1
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°	984.4	27.2
0°-40°	1594.2	44.1
0°-60°	2793.5	77.3
0°-90°	3614.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3614.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1290	1290	1290	1290	1290	
5°	1285	1285	1299	1290	1279	122
15°	1220	1221	1228	1236	1239	344
25°	1093	1100	1118	1137	1151	503
35°	926	938	972	1009	1032	579
45°	738	758	807	866	898	569
55°	545	571	638	708	743	487
65°	357	388	464	534	571	354
75°	184	220	283	325	343	196
85°	46	58	67	65	65	53
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1290.0	1290.0	1290.0	1290.0	1290.0
2.5°	1316.3	1311.0	1295.2	1284.7	1279.4
5°	1284.7	1284.7	1298.7	1290.0	1279.4
7.5°	1274.1	1274.1	1274.1	1300.5	1274.1
10°	1260.1	1261.8	1263.6	1274.1	1263.6
12.5°	1244.3	1244.3	1247.8	1251.3	1253.1
15°	1219.7	1221.4	1228.4	1235.5	1239.0
17.5°	1193.3	1198.6	1207.4	1216.1	1223.2
20°	1161.7	1168.7	1179.2	1193.3	1200.3
22.5°	1128.3	1135.3	1149.4	1165.2	1177.5
25°	1093.1	1100.2	1117.7	1137.1	1151.1
27.5°	1052.7	1061.5	1082.6	1108.9	1123.0
30°	1012.3	1022.8	1047.4	1077.3	1093.1
32.5°	970.1	982.4	1010.5	1043.9	1063.2
35°	926.2	938.5	971.9	1008.8	1031.6
37.5°	880.5	894.5	931.4	973.6	998.2
40°	833.0	848.8	891.0	936.7	964.8
42.5°	785.6	803.1	848.8	903.3	931.4
45°	738.1	757.5	806.7	866.4	898.1
47.5°	688.9	711.8	762.7	829.5	861.1
50°	641.5	664.3	722.3	790.8	822.5
52.5°	592.3	618.6	680.1	750.4	783.8
55°	544.8	571.2	637.9	708.2	743.4
57.5°	497.4	523.7	594.0	666.1	701.2
60°	449.9	478.0	551.8	622.1	659.0
62.5°	402.5	432.3	507.9	580.0	615.1
65°	356.8	388.4	464.0	534.3	571.2
67.5°	312.8	346.2	420.0	488.6	525.5
70°	268.9	302.3	374.3	441.1	478.0
72.5°	226.7	260.1	330.4	390.2	418.3
75°	184.5	219.7	282.9	325.1	342.7
77.5°	144.1	179.3	233.7	261.9	281.2
80°	107.2	137.1	175.7	196.8	203.9
82.5°	73.8	98.4	123.0	128.3	131.8
85°	45.7	58.0	66.8	65.0	65.0
87.5°	21.1	22.8	19.3	14.1	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)