

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: P259225

Luminaire Tested: **22CZ-LD5-34-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259225  
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-LD5-34-UNV-L83050-W2A1-U-4000K  
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3608.0 lumens  
Efficiency: N/A  
Efficacy: 137.6 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

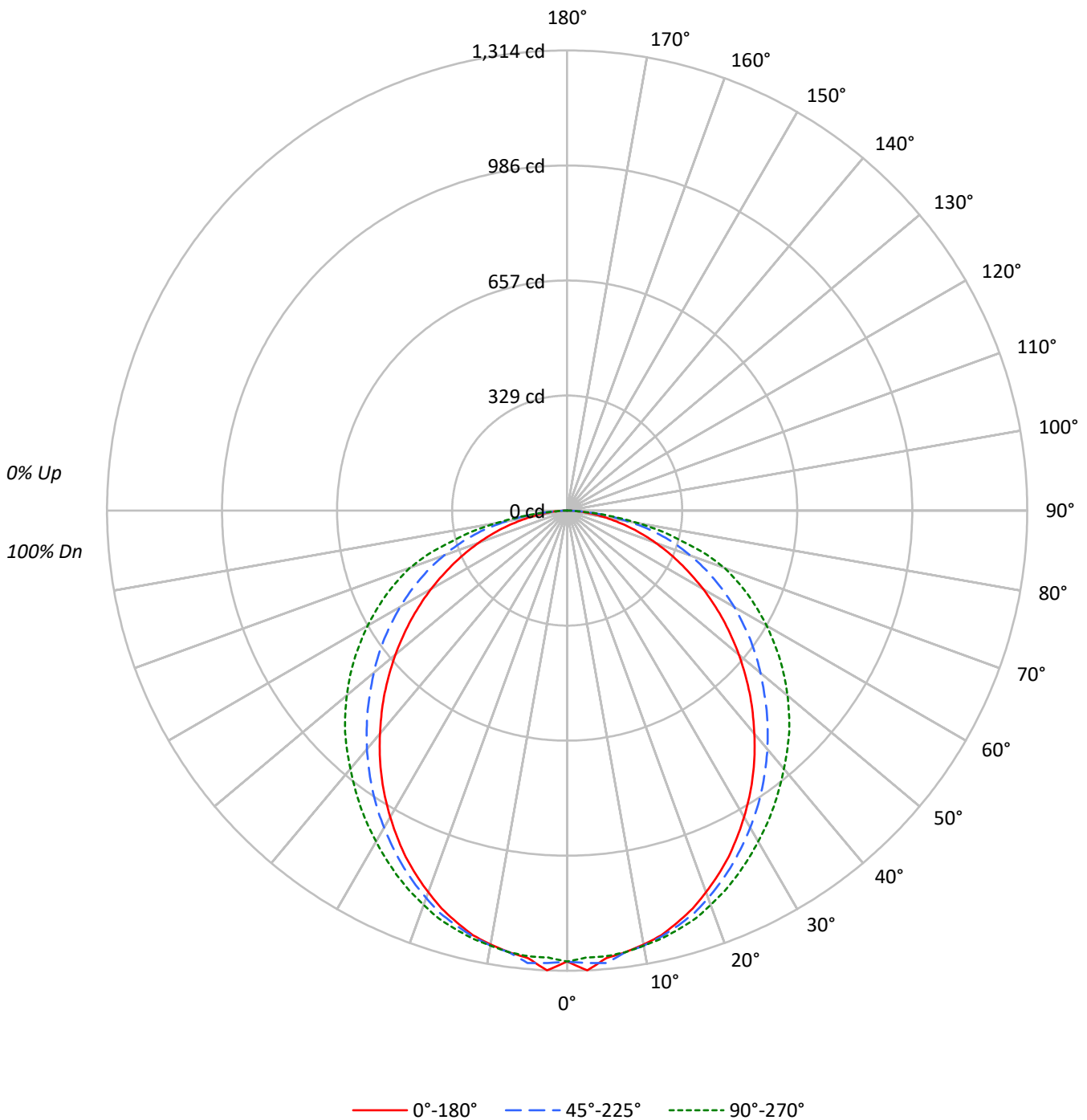
Input Watts (W): 26.226  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

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

	0°	45°	90°
0°	3465	3465	3465
5°	3465	3502	3450
10°	3437	3447	3447
15°	3392	3417	3446
20°	3321	3371	3432
25°	3240	3313	3412
30°	3140	3249	3391
35°	3037	3187	3383
40°	2921	3125	3384
45°	2804	3065	3412
50°	2681	3019	3437
55°	2552	2988	3482
60°	2418	2965	3541
65°	2268	2949	3631
70°	2112	2940	3755
75°	1915	2937	3557
80°	1658	2720	3154
85°	1408	2059	2004



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.1	3.4
10°-20°	346.0	9.6
20°-30°	514.7	14.3
30°-40°	608.7	16.9
40°-50°	625.7	17.3
50°-60°	571.7	15.8
60°-70°	457.3	12.7
70°-80°	287.0	8.0
80°-90°	74.8	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°	982.8	27.2
0°-40°	1591.5	44.1
0°-60°	2788.9	77.3
0°-90°	3608.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3608.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1288	1288	1288	1288	1288	
5°	1283	1283	1297	1288	1277	122
15°	1218	1219	1226	1233	1237	343
25°	1091	1098	1116	1135	1149	502
35°	925	937	970	1007	1030	578
45°	737	756	805	865	897	568
55°	544	570	637	707	742	487
65°	356	388	463	533	570	353
75°	184	219	282	325	342	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°	1287.8	1287.8	1287.8	1287.8	1287.8
2.5°	1314.1	1308.9	1293.1	1282.6	1277.3
5°	1282.6	1282.6	1296.6	1287.8	1277.3
7.5°	1272.0	1272.0	1272.0	1298.3	1272.0
10°	1258.0	1259.7	1261.5	1272.0	1261.5
12.5°	1242.2	1242.2	1245.7	1249.2	1251.0
15°	1217.6	1219.4	1226.4	1233.4	1236.9
17.5°	1191.3	1196.6	1205.4	1214.1	1221.1
20°	1159.7	1166.8	1177.3	1191.3	1198.3
22.5°	1126.4	1133.4	1147.5	1163.2	1175.5
25°	1091.3	1098.3	1115.9	1135.2	1149.2
27.5°	1051.0	1059.7	1080.8	1107.1	1121.1
30°	1010.6	1021.1	1045.7	1075.5	1091.3
32.5°	968.5	980.8	1008.8	1042.2	1061.5
35°	924.6	936.9	970.2	1007.1	1029.9
37.5°	879.0	893.1	929.9	972.0	996.6
40°	831.6	847.4	889.5	935.2	963.2
42.5°	784.3	801.8	847.4	901.8	929.9
45°	736.9	756.2	805.3	865.0	896.6
47.5°	687.8	710.6	761.5	828.1	859.7
50°	640.4	663.2	721.1	789.5	821.1
52.5°	591.3	617.6	679.0	749.2	782.5
55°	543.9	570.2	636.9	707.1	742.2
57.5°	496.5	522.8	593.0	665.0	700.1
60°	449.2	477.2	550.9	621.1	657.9
62.5°	401.8	431.6	507.1	579.0	614.1
65°	356.2	387.7	463.2	533.4	570.2
67.5°	312.3	345.6	419.3	487.8	524.6
70°	268.4	301.8	373.7	440.4	477.2
72.5°	226.3	259.7	329.8	389.5	417.6
75°	184.2	219.3	282.5	324.6	342.1
77.5°	143.9	179.0	233.4	261.4	280.7
80°	107.0	136.9	175.5	196.5	203.5
82.5°	73.7	98.3	122.8	128.1	131.6
85°	45.6	57.9	66.7	64.9	64.9
87.5°	21.1	22.8	19.3	14.0	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)