

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: P258551

Luminaire Tested: **14CZ-LD5-35-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258551  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35573)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ-LD5-35-UNV-L83050-W2A1-U-3000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3340.6 lumens  
Efficiency: N/A  
Efficacy: 122.2 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

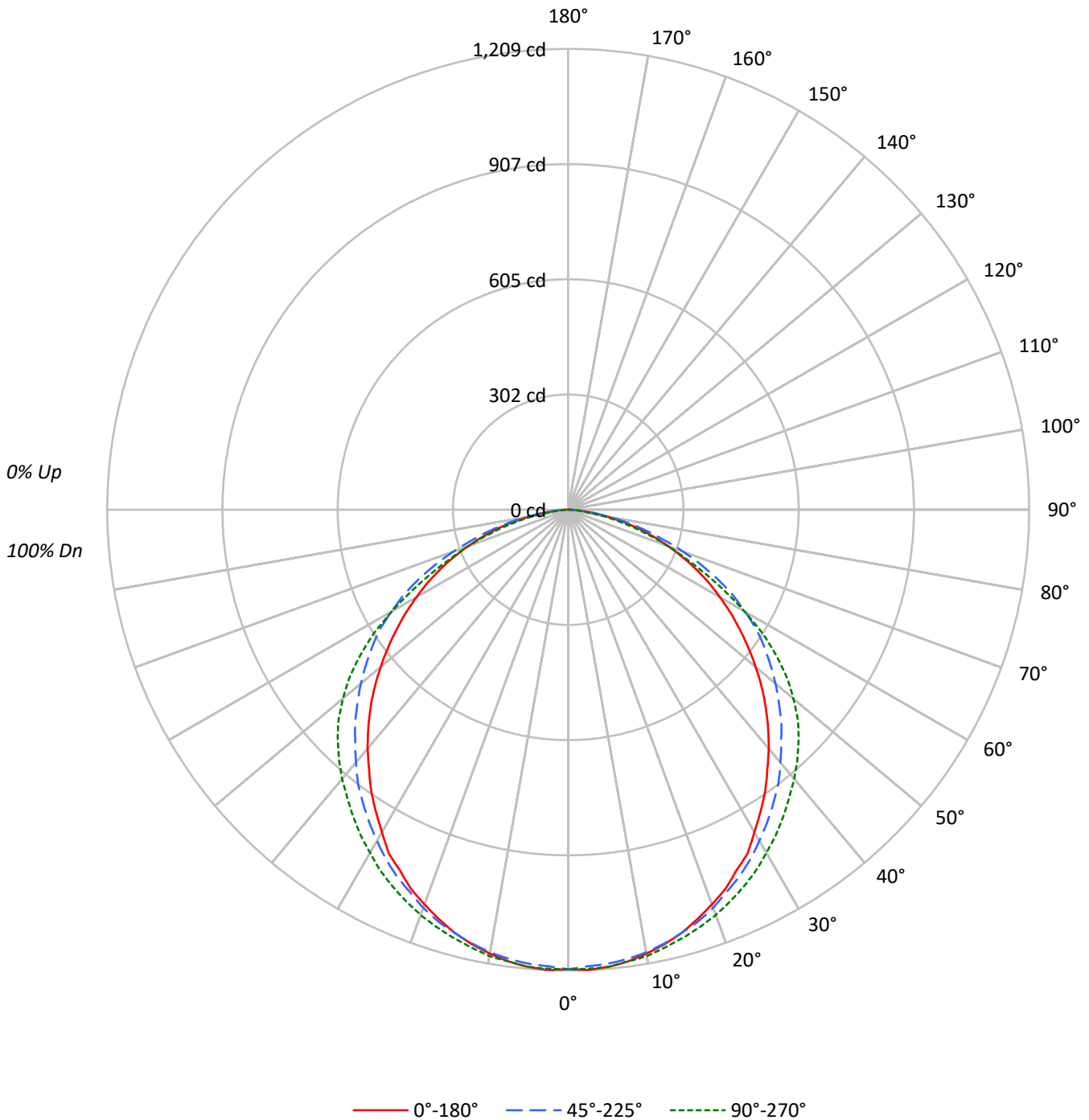
Input Watts (W): 27.342  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P258551

CATALOG NUMBER: 14CZ-LD5-35-UNV-L83050-W2A1-U-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P258551

CATALOG NUMBER: 14CZ-LD5-35-UNV-L83050-W2A1-U-3000K

**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	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	90	80	72	66	88	78	71	65	75	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	36	34
8	61	47	39	33	59	46	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	29	42	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26	25

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

	0°	45°	90°
0°	3244	3244	3244
5°	3252	3230	3252
10°	3231	3222	3249
15°	3202	3202	3239
20°	3155	3183	3240
25°	3100	3154	3237
30°	3035	3117	3229
35°	2959	3084	3230
40°	2875	3043	3240
45°	2789	3008	3253
50°	2689	2972	3226
55°	2581	2944	3121
60°	2473	2880	2872
65°	2359	2758	2517
70°	2190	2514	2177
75°	1986	2192	1798
80°	1582	1736	1327
85°	1118	966	763



TEST NUMBER: P258551

CATALOG NUMBER: 14CZ-LD5-35-UNV-L83050-W2A1-U-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.1	3.4
10°-20°	325.9	9.8
20°-30°	491.3	14.7
30°-40°	588.9	17.6
40°-50°	611.2	18.3
50°-60°	551.2	16.5
60°-70°	402.1	12.0
70°-80°	211.0	6.3
80°-90°	45.0	1.3
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°	931.2	27.9
0°-40°	1520.1	45.5
0°-60°	2682.5	80.3
0°-90°	3340.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3340.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1206	1206	1206	1206	1206	
5°	1204	1201	1196	1204	1204	114
15°	1150	1150	1150	1163	1163	324
25°	1044	1049	1062	1085	1090	482
35°	901	911	939	973	983	563
45°	733	748	790	838	855	565
55°	550	570	628	669	665	493
65°	370	392	433	417	395	366
75°	191	217	211	183	173	200
85°	36	44	31	26	25	46
90°	0	0	0	0	0	



TEST NUMBER: P258551

CATALOG NUMBER: 14CZ-LD5-35-UNV-L83050-W2A1-U-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1205.5	1205.5	1205.5	1205.5	1205.5
2.5°	1208.8	1205.5	1198.9	1205.5	1205.5
5°	1203.9	1200.6	1195.6	1203.9	1203.9
7.5°	1195.6	1192.3	1189.1	1197.3	1195.6
10°	1182.5	1180.8	1179.2	1189.1	1189.1
12.5°	1167.6	1167.6	1166.0	1177.5	1175.9
15°	1149.5	1149.5	1149.5	1162.7	1162.7
17.5°	1126.5	1129.8	1133.1	1147.9	1147.9
20°	1101.8	1105.1	1111.6	1129.8	1131.4
22.5°	1077.1	1078.7	1085.3	1106.7	1111.6
25°	1044.1	1049.1	1062.2	1085.3	1090.2
27.5°	1017.8	1019.4	1034.2	1060.6	1067.2
30°	976.6	988.1	1003.0	1032.6	1039.2
32.5°	938.7	948.6	971.7	1003.0	1012.8
35°	900.8	910.7	938.7	973.3	983.2
37.5°	858.0	872.8	905.8	940.4	951.9
40°	818.5	831.7	866.3	909.1	922.3
42.5°	775.7	788.9	826.7	874.5	889.3
45°	732.9	747.7	790.5	838.3	854.7
47.5°	688.4	704.9	749.3	802.0	816.9
50°	642.3	660.4	709.8	764.2	770.7
52.5°	596.2	615.9	668.6	716.4	723.0
55°	550.1	569.8	627.5	668.6	665.3
57.5°	505.6	527.0	586.3	607.7	604.4
60°	459.5	482.5	535.2	545.1	533.6
62.5°	416.7	438.1	487.5	479.2	464.4
65°	370.5	392.0	433.1	416.7	395.3
67.5°	324.4	350.8	377.1	349.1	332.7
70°	278.3	308.0	319.5	291.5	276.7
72.5°	233.9	265.1	261.9	233.9	224.0
75°	191.0	217.4	210.8	182.8	172.9
77.5°	144.9	174.6	159.7	136.7	128.5
80°	102.1	128.5	112.0	92.2	85.6
82.5°	67.5	85.6	69.2	54.3	49.4
85°	36.2	44.5	31.3	26.4	24.7
87.5°	14.8	13.2	11.5	11.5	9.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)