

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: P275611

Luminaire Tested: **14CZ2-44-S-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275611  
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-L93050-W2A1-U-3000K  
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3381.0 lumens  
Efficiency: N/A  
Efficacy: 92.7 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

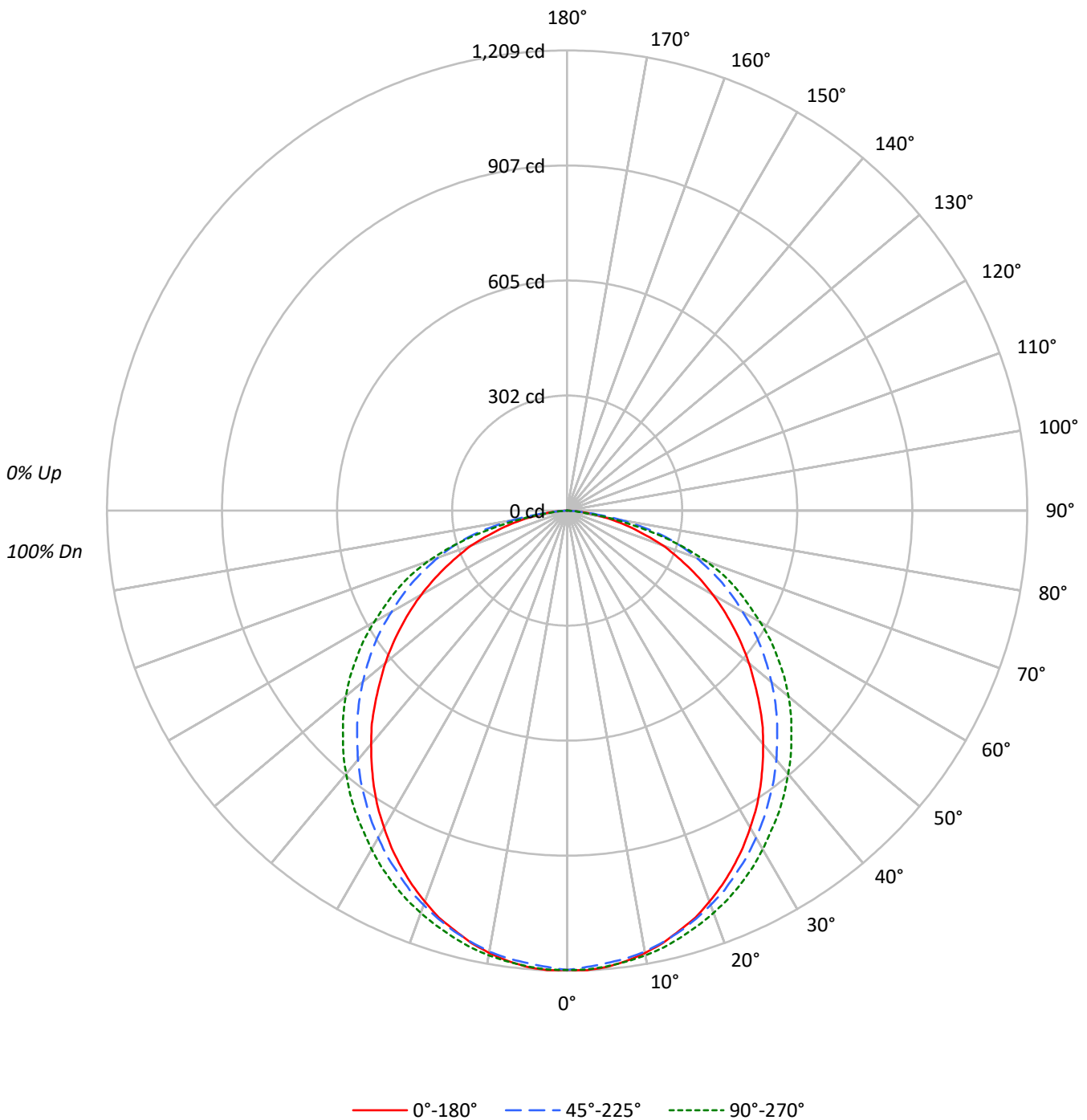
Input Watts (W): 36.456  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	94	97	94	91	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	3248	3248	3248
5°	3251	3224	3247
10°	3225	3216	3243
15°	3180	3190	3232
20°	3130	3159	3221
25°	3066	3121	3210
30°	2990	3084	3193
35°	2908	3040	3183
40°	2815	3003	3174
45°	2711	2966	3170
50°	2611	2933	3179
55°	2501	2910	3170
60°	2382	2869	3148
65°	2241	2861	3149
70°	2110	2836	3060
75°	1830	2771	2615
80°	1481	2235	1740
85°	985	775	519



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.0	3.4
10°-20°	324.3	9.6
20°-30°	486.5	14.4
30°-40°	580.3	17.2
40°-50°	599.9	17.7
50°-60°	547.7	16.2
60°-70°	431.1	12.7
70°-80°	250.9	7.4
80°-90°	46.2	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°	924.8	27.4
0°-40°	1505.1	44.5
0°-60°	2652.8	78.5
0°-90°	3381.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3381.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1207	1207	1207	1207	1207	
5°	1204	1200	1194	1204	1202	114
15°	1142	1143	1145	1160	1160	322
25°	1033	1038	1051	1076	1081	475
35°	885	897	925	960	969	553
45°	712	736	780	823	833	550
55°	533	562	620	666	676	477
65°	352	389	449	484	494	350
75°	176	218	266	262	252	187
85°	32	45	25	20	17	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1207.0	1207.0	1207.0	1207.0	1207.0
2.5°	1208.6	1205.3	1200.3	1208.6	1207.0
5°	1203.6	1200.3	1193.6	1203.6	1201.9
7.5°	1193.6	1190.2	1186.8	1196.9	1195.2
10°	1180.1	1178.5	1176.8	1188.5	1186.8
12.5°	1163.4	1163.4	1161.7	1175.1	1175.1
15°	1141.6	1143.3	1144.9	1160.0	1160.0
17.5°	1121.5	1119.8	1124.8	1141.6	1143.3
20°	1093.0	1096.3	1103.0	1123.1	1124.8
22.5°	1064.5	1067.8	1079.6	1099.7	1104.7
25°	1032.6	1037.7	1051.1	1076.2	1081.2
27.5°	999.1	1005.8	1024.2	1051.1	1056.1
30°	962.2	972.3	992.4	1022.6	1027.6
32.5°	925.3	935.4	960.5	990.7	997.4
35°	885.1	896.8	925.3	960.5	968.9
37.5°	843.2	858.3	891.8	927.0	937.1
40°	801.3	818.1	854.9	891.8	903.5
42.5°	759.4	776.1	816.4	858.3	870.0
45°	712.4	735.9	779.5	823.1	833.1
47.5°	667.2	692.3	740.9	784.5	797.9
50°	623.6	648.7	700.7	746.0	759.4
52.5°	578.3	605.2	660.5	707.4	719.1
55°	533.1	561.6	620.2	665.5	675.6
57.5°	487.8	518.0	578.3	621.9	633.7
60°	442.6	474.4	533.1	576.7	585.0
62.5°	397.3	430.8	491.2	529.7	538.1
65°	352.0	388.9	449.3	484.5	494.5
67.5°	308.4	345.3	404.0	437.5	445.9
70°	268.2	301.7	360.4	385.6	388.9
72.5°	217.9	259.8	316.8	330.2	321.9
75°	176.0	217.9	266.5	261.5	251.5
77.5°	134.1	176.0	207.9	191.1	177.7
80°	95.6	137.5	144.2	119.0	112.3
82.5°	62.0	95.6	80.5	62.0	50.3
85°	31.9	45.3	25.1	20.1	16.8
87.5°	10.1	6.7	3.4	3.4	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)