

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: P275647

Luminaire Tested: **14CZ2-35-S-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275647  
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: 14CZ2-35-S-UNV-L82765-W2A1-U-4500K  
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3578.0 lumens  
Efficiency: N/A  
Efficacy: 127.8 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

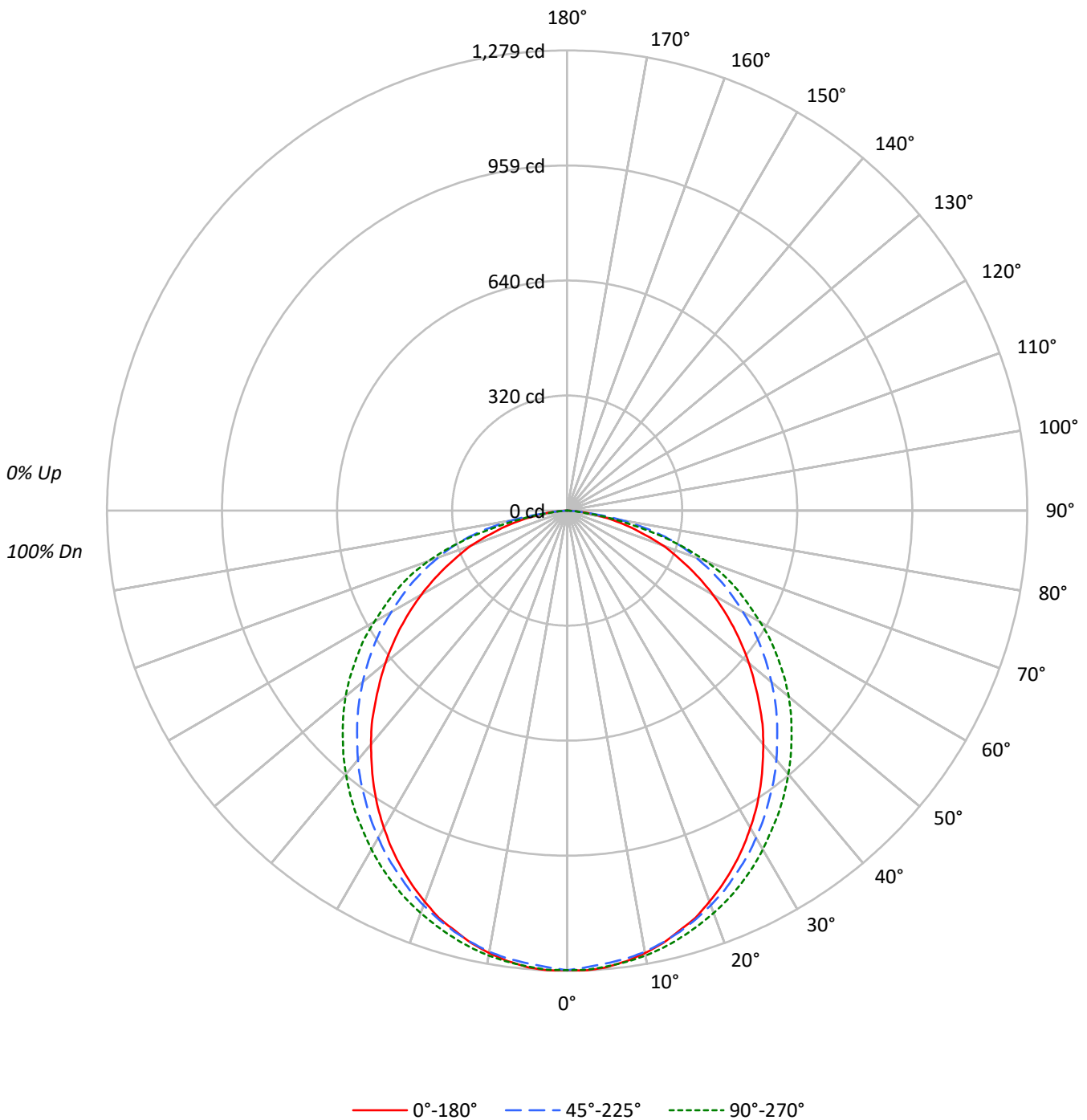
Input Watts (W): 27.993  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	3437	3437	3437
5°	3441	3412	3436
10°	3413	3403	3432
15°	3366	3375	3420
20°	3312	3343	3409
25°	3245	3303	3397
30°	3164	3263	3379
35°	3077	3217	3369
40°	2979	3178	3359
45°	2869	3139	3355
50°	2763	3104	3364
55°	2647	3080	3354
60°	2520	3036	3332
65°	2372	3027	3332
70°	2233	3001	3238
75°	1937	2933	2767
80°	1567	2365	1843
85°	1041	821	546



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.6	3.4
10°-20°	343.2	9.6
20°-30°	514.8	14.4
30°-40°	614.1	17.2
40°-50°	634.9	17.7
50°-60°	579.7	16.2
60°-70°	456.2	12.7
70°-80°	265.5	7.4
80°-90°	48.9	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°	978.7	27.4
0°-40°	1592.8	44.5
0°-60°	2807.4	78.5
0°-90°	3578.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3578.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1277	1277	1277	1277	1277	
5°	1274	1270	1263	1274	1272	121
15°	1208	1210	1212	1228	1228	341
25°	1093	1098	1112	1139	1144	503
35°	937	949	979	1016	1025	585
45°	754	779	825	871	882	582
55°	564	594	656	704	715	504
65°	372	412	475	513	523	370
75°	186	231	282	277	266	198
85°	34	48	27	21	18	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1277.3	1277.3	1277.3	1277.3	1277.3
2.5°	1279.1	1275.5	1270.2	1279.1	1277.3
5°	1273.7	1270.2	1263.1	1273.7	1272.0
7.5°	1263.1	1259.5	1256.0	1266.6	1264.9
10°	1248.9	1247.1	1245.4	1257.8	1256.0
12.5°	1231.2	1231.2	1229.4	1243.6	1243.6
15°	1208.1	1209.9	1211.6	1227.6	1227.6
17.5°	1186.8	1185.0	1190.4	1208.1	1209.9
20°	1156.7	1160.2	1167.3	1188.6	1190.4
22.5°	1126.5	1130.0	1142.5	1163.8	1169.1
25°	1092.8	1098.1	1112.3	1138.9	1144.2
27.5°	1057.3	1064.4	1083.9	1112.3	1117.6
30°	1018.3	1028.9	1050.2	1082.1	1087.5
32.5°	979.3	989.9	1016.5	1048.4	1055.5
35°	936.7	949.1	979.3	1016.5	1025.4
37.5°	892.3	908.3	943.8	981.0	991.7
40°	848.0	865.7	904.7	943.8	956.2
42.5°	803.6	821.4	863.9	908.3	920.7
45°	754.0	778.8	824.9	871.0	881.7
47.5°	706.1	732.7	784.1	830.2	844.4
50°	659.9	686.5	741.5	789.4	803.6
52.5°	612.0	640.4	699.0	748.6	761.0
55°	564.1	594.3	656.4	704.3	714.9
57.5°	516.2	548.2	612.0	658.2	670.6
60°	468.3	502.0	564.1	610.3	619.1
62.5°	420.4	455.9	519.8	560.6	569.5
65°	372.5	411.6	475.4	512.7	523.3
67.5°	326.4	365.4	427.5	463.0	471.9
70°	283.8	319.3	381.4	408.0	411.6
72.5°	230.6	275.0	335.3	349.5	340.6
75°	186.3	230.6	282.1	276.7	266.1
77.5°	141.9	186.3	220.0	202.2	188.0
80°	101.1	145.5	152.6	126.0	118.9
82.5°	65.6	101.1	85.2	65.6	53.2
85°	33.7	47.9	26.6	21.3	17.7
87.5°	10.6	7.1	3.5	3.5	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)