

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: P277480

Luminaire Tested: **22CZ2-44HE-S-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277480  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-44HE-S-UNV-L92765-W2A1-U-3000K  
Description: CRUZE 2.0 2x2 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: 3538.0 lumens  
Efficiency: N/A  
Efficacy: 103.1 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

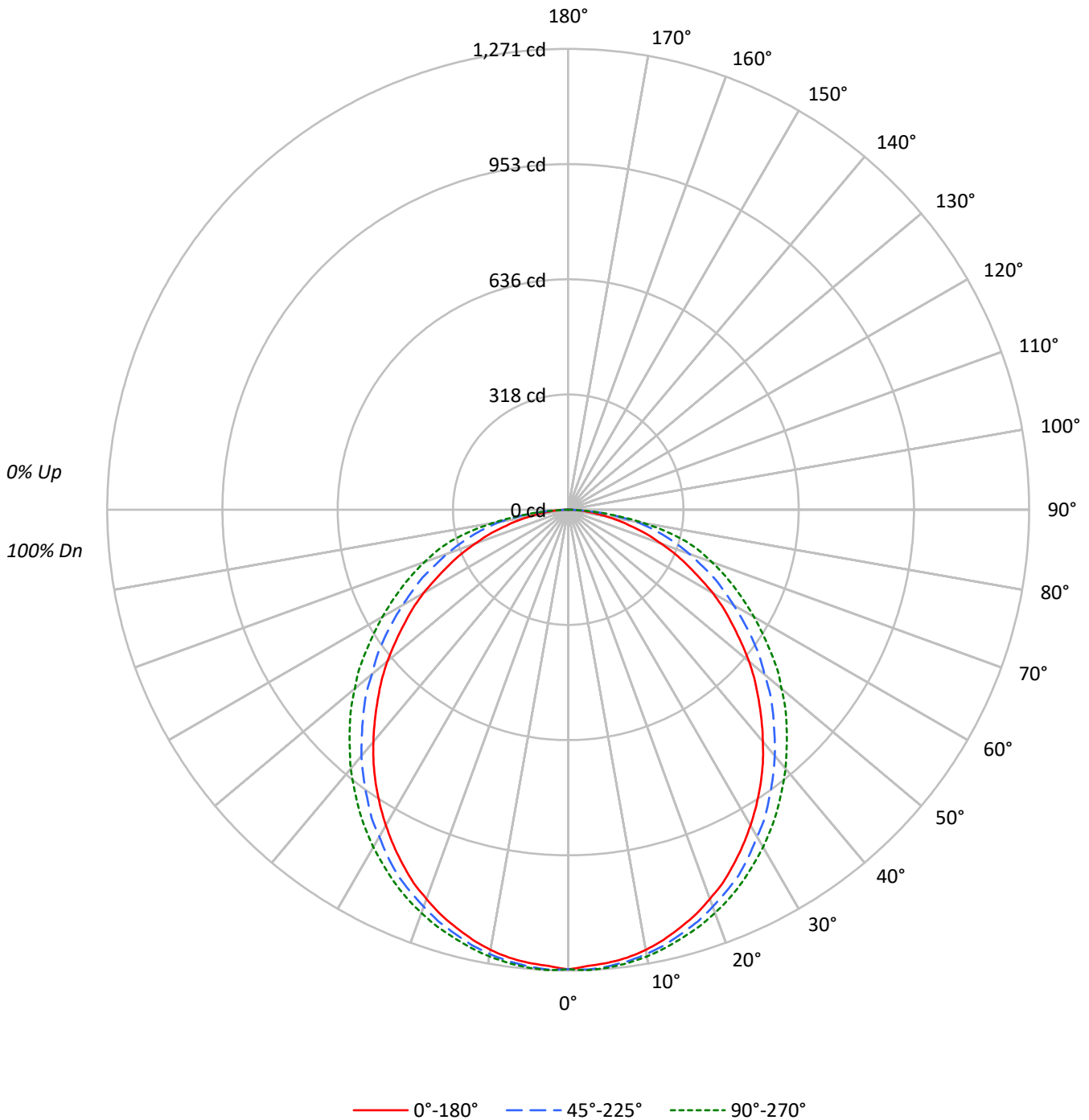
Input Watts (W): 34.317  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	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	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	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	51	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	3412	3412	3412
5°	3389	3416	3425
10°	3369	3401	3419
15°	3325	3371	3403
20°	3271	3337	3389
25°	3206	3303	3367
30°	3124	3237	3339
35°	3037	3178	3308
40°	2934	3114	3276
45°	2827	3041	3242
50°	2723	2958	3213
55°	2594	2904	3191
60°	2479	2834	3181
65°	2313	2817	3216
70°	2130	2792	3312
75°	1922	2832	3484
80°	1663	2916	3274
85°	1377	2445	2445



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.9	3.4
10°-20°	341.2	9.6
20°-30°	510.5	14.4
30°-40°	604.6	17.1
40°-50°	616.1	17.4
50°-60°	552.2	15.6
60°-70°	432.3	12.2
70°-80°	278.8	7.9
80°-90°	82.4	2.3
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°	971.6	27.5
0°-40°	1576.2	44.5
0°-60°	2744.5	77.6
0°-90°	3538.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3538.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1268	1268	1268	1268	1268	
5°	1255	1258	1264	1266	1268	119
15°	1194	1200	1210	1220	1222	336
25°	1080	1090	1113	1128	1134	497
35°	924	936	967	997	1007	578
45°	743	759	799	840	852	574
55°	553	571	619	662	680	496
65°	363	385	442	485	505	361
75°	185	213	272	319	335	198
85°	45	61	79	79	79	52
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1267.8	1267.8	1267.8	1267.8	1267.8
2.5°	1259.5	1262.8	1269.4	1271.1	1271.1
5°	1254.6	1257.9	1264.5	1266.1	1267.8
7.5°	1246.3	1248.0	1256.2	1259.5	1261.2
10°	1233.1	1236.4	1244.7	1249.6	1251.3
12.5°	1215.0	1219.9	1229.8	1236.4	1238.1
15°	1193.5	1200.1	1210.0	1219.9	1221.6
17.5°	1170.4	1177.0	1190.2	1201.7	1205.0
20°	1142.3	1150.6	1165.4	1178.6	1183.6
22.5°	1114.3	1120.9	1139.0	1155.5	1160.5
25°	1079.6	1089.5	1112.6	1127.5	1134.1
27.5°	1043.3	1054.8	1077.9	1097.7	1104.4
30°	1005.3	1016.9	1041.6	1066.4	1074.6
32.5°	965.7	978.9	1008.6	1033.4	1041.6
35°	924.4	936.0	967.3	997.1	1007.0
37.5°	881.5	891.4	927.7	959.1	969.0
40°	835.3	848.5	886.5	922.8	932.7
42.5°	789.1	803.9	841.9	881.5	891.4
45°	742.8	759.3	799.0	840.2	851.8
47.5°	698.3	711.5	756.0	795.7	812.2
50°	650.4	663.6	706.5	751.1	767.6
52.5°	600.9	619.0	665.3	708.2	728.0
55°	553.0	571.2	619.0	662.0	680.1
57.5°	508.4	523.3	572.8	617.4	635.5
60°	460.6	473.8	526.6	574.5	591.0
62.5°	409.4	429.2	483.7	528.2	548.0
65°	363.2	384.6	442.4	485.3	505.1
67.5°	320.2	340.1	396.2	442.4	463.9
70°	270.7	297.1	354.9	401.1	420.9
72.5°	231.1	254.2	313.6	359.9	381.3
75°	184.9	212.9	272.4	318.6	335.1
77.5°	146.9	175.0	231.1	267.4	275.7
80°	107.3	135.4	188.2	206.3	211.3
82.5°	72.6	99.0	135.4	140.3	142.0
85°	44.6	61.1	79.2	79.2	79.2
87.5°	21.5	24.8	28.1	26.4	26.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)