

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: P277408

Luminaire Tested: **22CZ2-34HE-S-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277408  
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: 22CZ2-34HE-S-UNV-L82765-W2A1-U-3000K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3189.0 lumens  
Efficiency: N/A  
Efficacy: 125.1 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

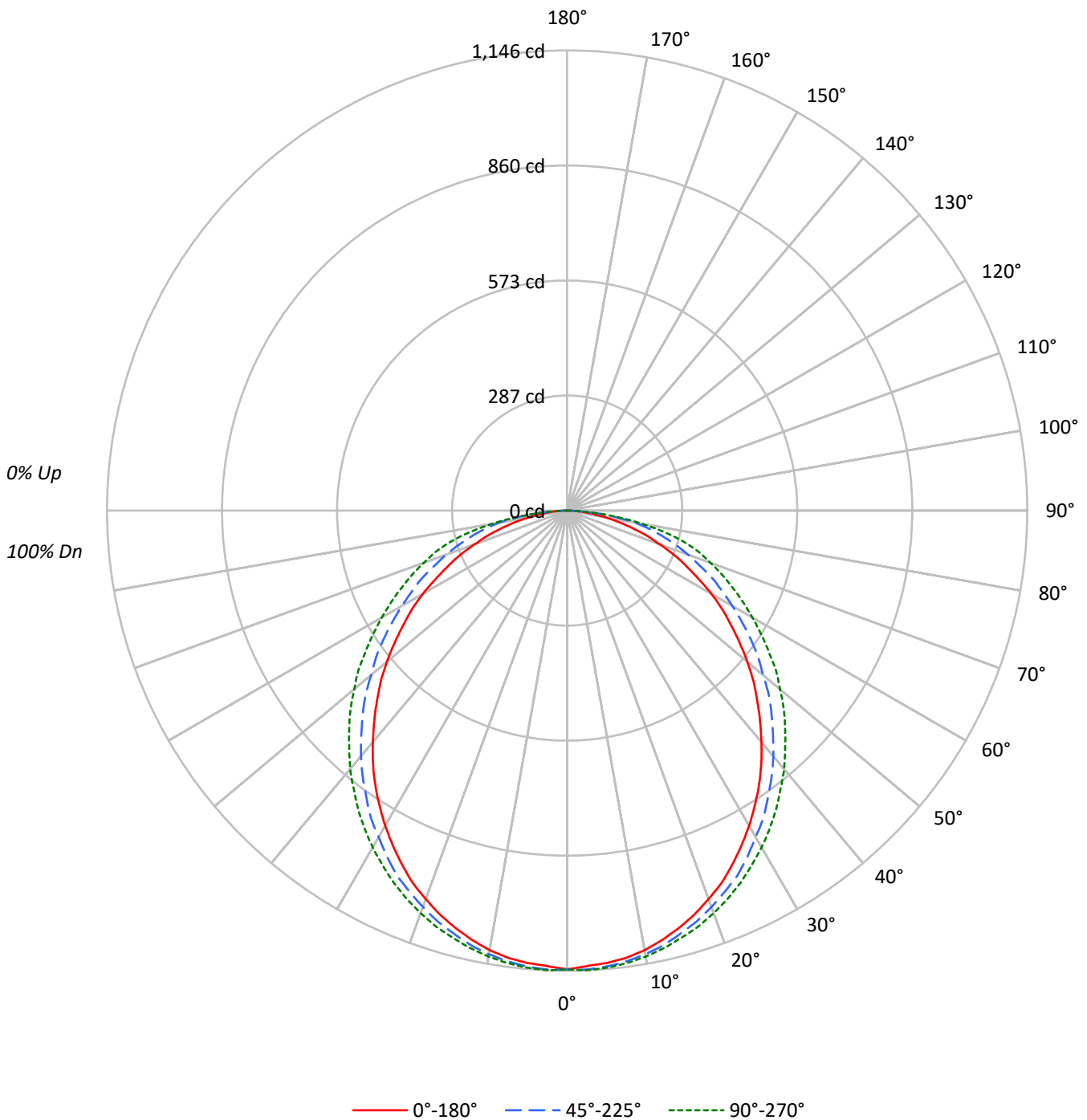
Input Watts (W): 25.482  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3075	3075	3075
5°	3055	3079	3087
10°	3037	3066	3082
15°	2997	3038	3068
20°	2948	3008	3055
25°	2889	2978	3035
30°	2816	2917	3010
35°	2737	2864	2982
40°	2645	2807	2953
45°	2548	2741	2922
50°	2454	2666	2897
55°	2339	2618	2876
60°	2234	2554	2867
65°	2084	2539	2899
70°	1920	2517	2985
75°	1732	2552	3140
80°	1499	2628	2952
85°	1241	2205	2205



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.1	3.4
10°-20°	307.5	9.6
20°-30°	460.2	14.4
30°-40°	544.9	17.1
40°-50°	555.4	17.4
50°-60°	497.8	15.6
60°-70°	389.7	12.2
70°-80°	251.3	7.9
80°-90°	74.2	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°	875.7	27.5
0°-40°	1420.7	44.5
0°-60°	2473.8	77.6
0°-90°	3189.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3189.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1143	1143	1143	1143	1143	
5°	1131	1134	1140	1141	1143	107
15°	1076	1082	1091	1100	1101	303
25°	973	982	1003	1016	1022	448
35°	833	844	872	899	908	521
45°	670	684	720	757	768	517
55°	498	515	558	597	613	447
65°	327	347	399	437	455	325
75°	167	192	246	287	302	179
85°	40	55	71	71	71	47
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1142.7	1142.7	1142.7	1142.7	1142.7
2.5°	1135.3	1138.3	1144.2	1145.7	1145.7
5°	1130.8	1133.8	1139.7	1141.2	1142.7
7.5°	1123.4	1124.9	1132.3	1135.3	1136.8
10°	1111.5	1114.4	1121.9	1126.4	1127.8
12.5°	1095.1	1099.6	1108.5	1114.4	1115.9
15°	1075.8	1081.7	1090.6	1099.6	1101.1
17.5°	1054.9	1060.9	1072.8	1083.2	1086.2
20°	1029.6	1037.1	1050.5	1062.4	1066.8
22.5°	1004.3	1010.3	1026.7	1041.5	1046.0
25°	973.1	982.0	1002.9	1016.2	1022.2
27.5°	940.4	950.8	971.6	989.5	995.4
30°	906.1	916.6	938.9	961.2	968.6
32.5°	870.4	882.3	909.1	931.4	938.9
35°	833.2	843.6	871.9	898.7	907.6
37.5°	794.5	803.5	836.2	864.5	873.4
40°	752.9	764.8	799.0	831.7	840.7
42.5°	711.2	724.6	758.8	794.5	803.5
45°	669.6	684.4	720.2	757.3	767.8
47.5°	629.4	641.3	681.5	717.2	732.1
50°	586.2	598.1	636.8	677.0	691.9
52.5°	541.6	558.0	599.6	638.3	656.2
55°	498.5	514.8	558.0	596.7	613.0
57.5°	458.3	471.7	516.3	556.5	572.8
60°	415.1	427.0	474.6	517.8	532.7
62.5°	369.0	386.9	436.0	476.1	494.0
65°	327.3	346.7	398.8	437.4	455.3
67.5°	288.7	306.5	357.1	398.8	418.1
70°	244.0	267.8	319.9	361.6	379.4
72.5°	208.3	229.1	282.7	324.4	343.7
75°	166.6	191.9	245.5	287.2	302.0
77.5°	132.4	157.7	208.3	241.0	248.5
80°	96.7	122.0	169.6	186.0	190.5
82.5°	65.5	89.3	122.0	126.5	128.0
85°	40.2	55.1	71.4	71.4	71.4
87.5°	19.3	22.3	25.3	23.8	23.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)