

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: P277465

Luminaire Tested: **22CZ2-34HE-S-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277465  
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-L92765-W2A1-U-4500K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3060.0 lumens  
Efficiency: N/A  
Efficacy: 117.1 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

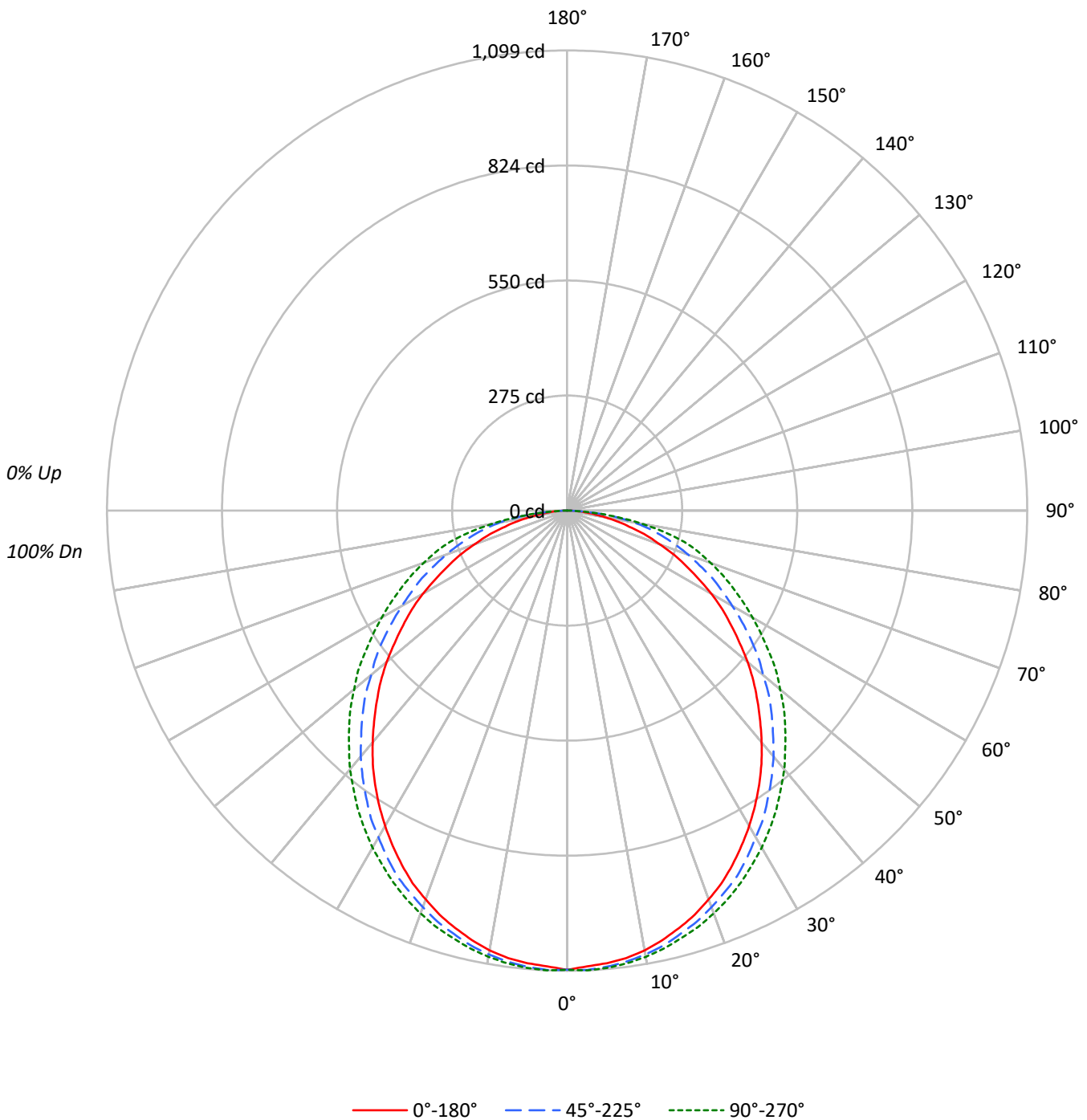
Input Watts (W): 26.133  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2951	2951	2951
5°	2931	2954	2962
10°	2914	2942	2957
15°	2876	2915	2943
20°	2829	2887	2932
25°	2772	2857	2912
30°	2702	2799	2888
35°	2626	2748	2861
40°	2538	2693	2834
45°	2445	2630	2804
50°	2355	2558	2779
55°	2244	2512	2760
60°	2144	2451	2751
65°	2000	2436	2782
70°	1842	2415	2865
75°	1663	2450	3013
80°	1438	2523	2831
85°	1189	2115	2115



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.7	3.4
10°-20°	295.1	9.6
20°-30°	441.5	14.4
30°-40°	522.9	17.1
40°-50°	532.9	17.4
50°-60°	477.6	15.6
60°-70°	373.9	12.2
70°-80°	241.1	7.9
80°-90°	71.2	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°	840.3	27.5
0°-40°	1363.2	44.5
0°-60°	2373.7	77.6
0°-90°	3060.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3060.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1096	1096	1096	1096	1096	
5°	1085	1088	1094	1095	1096	103
15°	1032	1038	1046	1055	1056	291
25°	934	942	962	975	981	430
35°	800	810	837	862	871	500
45°	642	657	691	727	737	496
55°	478	494	535	572	588	429
65°	314	333	383	420	437	312
75°	160	184	236	276	290	171
85°	38	53	68	68	68	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1096.5	1096.5	1096.5	1096.5	1096.5
2.5°	1089.4	1092.2	1097.9	1099.3	1099.3
5°	1085.1	1087.9	1093.6	1095.1	1096.5
7.5°	1077.9	1079.4	1086.5	1089.4	1090.8
10°	1066.5	1069.4	1076.5	1080.8	1082.2
12.5°	1050.8	1055.1	1063.7	1069.4	1070.8
15°	1032.2	1038.0	1046.5	1055.1	1056.5
17.5°	1012.3	1018.0	1029.4	1039.4	1042.2
20°	988.0	995.1	1008.0	1019.4	1023.7
22.5°	963.7	969.4	985.1	999.4	1003.7
25°	933.7	942.3	962.3	975.1	980.8
27.5°	902.3	912.3	932.3	949.4	955.1
30°	869.5	879.5	900.9	922.3	929.4
32.5°	835.2	846.6	872.3	893.8	900.9
35°	799.5	809.5	836.6	862.3	870.9
37.5°	762.4	771.0	802.4	829.5	838.1
40°	722.4	733.9	766.7	798.1	806.7
42.5°	682.5	695.3	728.1	762.4	771.0
45°	642.5	656.8	691.0	726.7	736.7
47.5°	603.9	615.3	653.9	688.2	702.4
50°	562.5	573.9	611.1	649.6	663.9
52.5°	519.7	535.4	575.4	612.5	629.6
55°	478.3	494.0	535.4	572.5	588.2
57.5°	439.7	452.6	495.4	534.0	549.7
60°	398.3	409.8	455.4	496.8	511.1
62.5°	354.1	371.2	418.3	456.9	474.0
65°	314.1	332.7	382.6	419.8	436.9
67.5°	277.0	294.1	342.7	382.6	401.2
70°	234.1	257.0	307.0	346.9	364.1
72.5°	199.9	219.9	271.3	311.2	329.8
75°	159.9	184.2	235.6	275.6	289.8
77.5°	127.1	151.3	199.9	231.3	238.4
80°	92.8	117.1	162.8	178.5	182.7
82.5°	62.8	85.7	117.1	121.4	122.8
85°	38.5	52.8	68.5	68.5	68.5
87.5°	18.6	21.4	24.3	22.8	22.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)