

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: P277407

Luminaire Tested: **22CZ2-34HE-S-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277407
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-2700K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3099.0 lumens
Efficiency: N/A
Efficacy: 120.7 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

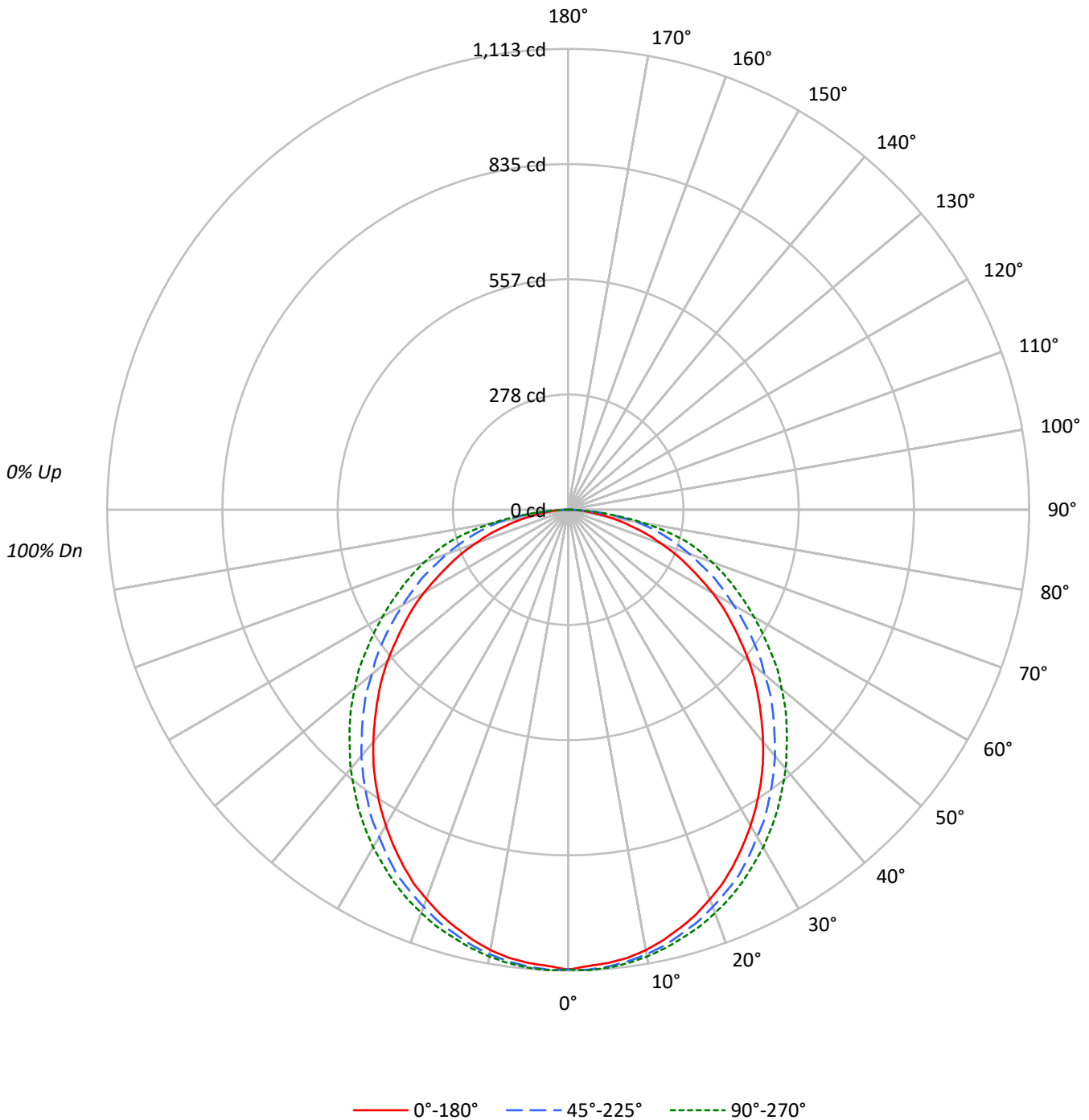
Input Watts (W): 25.668
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2988	2988	2988
5°	2968	2992	3000
10°	2951	2979	2995
15°	2912	2953	2981
20°	2865	2923	2969
25°	2808	2894	2949
30°	2736	2835	2925
35°	2660	2783	2897
40°	2570	2728	2870
45°	2476	2663	2839
50°	2385	2591	2815
55°	2273	2544	2795
60°	2171	2482	2786
65°	2025	2467	2818
70°	1865	2446	2901
75°	1683	2481	3052
80°	1457	2554	2868
85°	1204	2143	2143



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.0	3.4
10°-20°	298.9	9.6
20°-30°	447.2	14.4
30°-40°	529.6	17.1
40°-50°	539.7	17.4
50°-60°	483.7	15.6
60°-70°	378.7	12.2
70°-80°	244.2	7.9
80°-90°	72.1	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°	851.0	27.5
0°-40°	1380.6	44.5
0°-60°	2404.0	77.6
0°-90°	3099.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3099.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1110	1110	1110	1110	1110	
5°	1099	1102	1108	1109	1110	104
15°	1045	1051	1060	1068	1070	295
25°	946	954	975	988	993	435
35°	810	820	847	873	882	506
45°	651	665	700	736	746	502
55°	484	500	542	580	596	434
65°	318	337	388	425	442	316
75°	162	186	239	279	294	174
85°	39	54	69	69	69	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1110.5	1110.5	1110.5	1110.5	1110.5
2.5°	1103.2	1106.1	1111.9	1113.4	1113.4
5°	1098.9	1101.8	1107.6	1109.0	1110.5
7.5°	1091.7	1093.1	1100.3	1103.2	1104.7
10°	1080.1	1083.0	1090.2	1094.6	1096.0
12.5°	1064.2	1068.5	1077.2	1083.0	1084.4
15°	1045.4	1051.2	1059.9	1068.5	1070.0
17.5°	1025.2	1030.9	1042.5	1052.6	1055.5
20°	1000.6	1007.8	1020.8	1032.4	1036.7
22.5°	976.0	981.8	997.7	1012.1	1016.5
25°	945.6	954.3	974.6	987.6	993.3
27.5°	913.8	923.9	944.2	961.5	967.3
30°	880.6	890.7	912.4	934.1	941.3
32.5°	845.9	857.4	883.5	905.1	912.4
35°	809.7	819.8	847.3	873.3	882.0
37.5°	772.1	780.8	812.6	840.1	848.8
40°	731.6	743.2	776.5	808.3	816.9
42.5°	691.2	704.2	737.4	772.1	780.8
45°	650.7	665.1	699.8	736.0	746.1
47.5°	611.6	623.2	662.2	696.9	711.4
50°	569.7	581.3	618.9	657.9	672.4
52.5°	526.3	542.2	582.7	620.3	637.7
55°	484.4	500.3	542.2	579.8	595.7
57.5°	445.3	458.4	501.7	540.8	556.7
60°	403.4	415.0	461.2	503.2	517.6
62.5°	358.6	375.9	423.7	462.7	480.0
65°	318.1	336.9	387.5	425.1	442.5
67.5°	280.5	297.9	347.0	387.5	406.3
70°	237.1	260.3	310.9	351.4	368.7
72.5°	202.4	222.7	274.7	315.2	334.0
75°	161.9	186.5	238.6	279.1	293.5
77.5°	128.7	153.3	202.4	234.2	241.5
80°	94.0	118.6	164.8	180.7	185.1
82.5°	63.6	86.8	118.6	122.9	124.3
85°	39.0	53.5	69.4	69.4	69.4
87.5°	18.8	21.7	24.6	23.1	23.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)