

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: P258754

Luminaire Tested: **14CZ-LD5-39-S-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258754
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35112)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ-LD5-39-S-UNV-L93050-W2A1-U-3000K
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED AT 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3096.0 lumens
Efficiency: N/A
Efficacy: 97.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

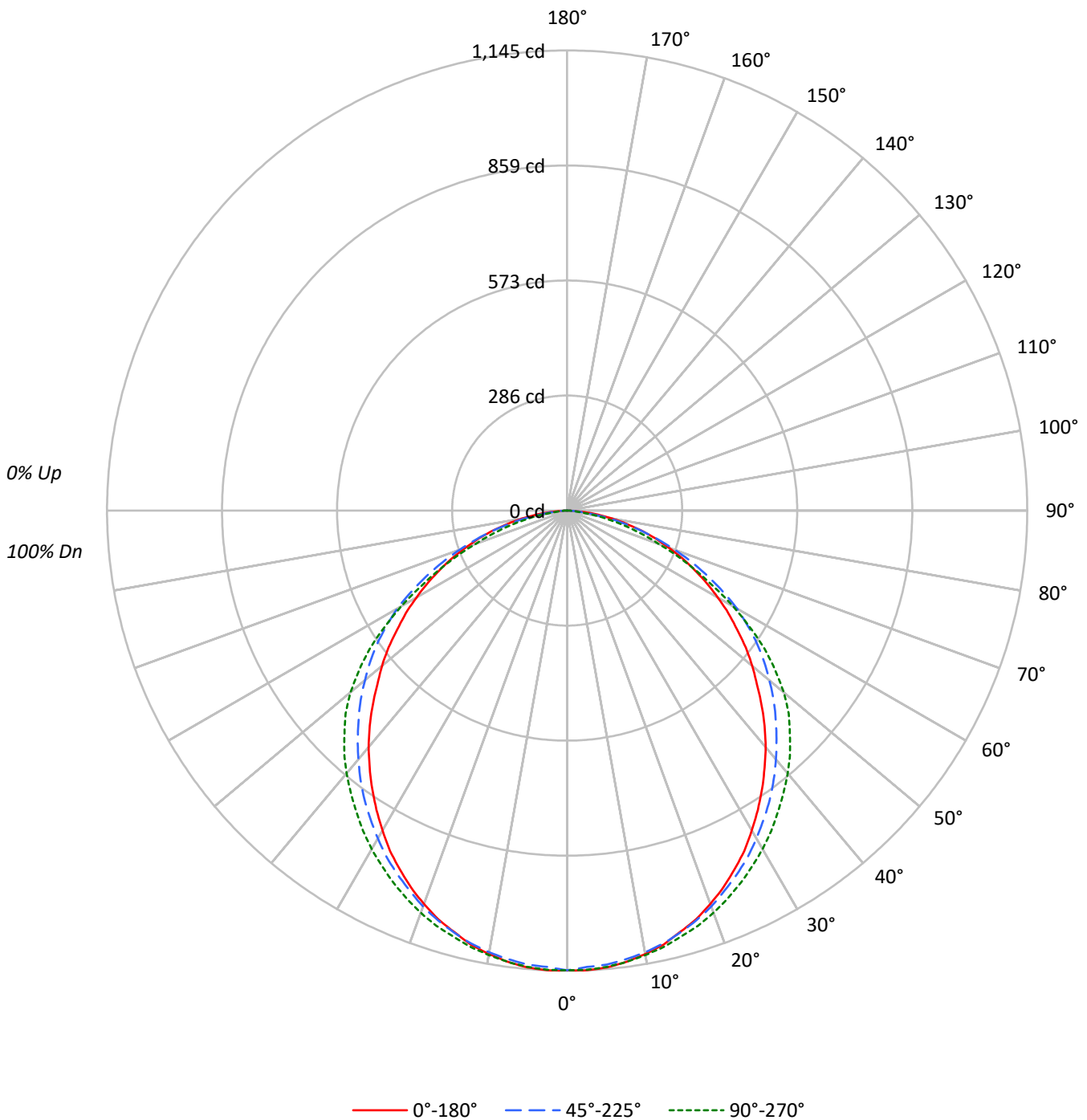
Input Watts (W): 31.713
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	100	97	106	102	98	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3078	3078	3078
5°	3082	3063	3078
10°	3061	3050	3069
15°	3025	3029	3056
20°	2983	3003	3050
25°	2925	2966	3035
30°	2855	2928	3022
35°	2778	2887	3005
40°	2699	2840	3000
45°	2604	2793	2982
50°	2518	2749	2946
55°	2421	2706	2815
60°	2331	2629	2569
65°	2231	2460	2257
70°	2105	2236	1910
75°	1965	1936	1578
80°	1731	1497	1155
85°	1362	726	639



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.1	3.5
10°-20°	307.9	9.9
20°-30°	462.0	14.9
30°-40°	550.8	17.8
40°-50°	567.4	18.3
50°-60°	505.6	16.3
60°-70°	364.3	11.8
70°-80°	190.5	6.2
80°-90°	39.4	1.3
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°	877.9	28.4
0°-40°	1428.8	46.1
0°-60°	2501.7	80.8
0°-90°	3096.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3096.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1144	1144	1144	1144	1144	
5°	1141	1138	1134	1141	1140	108
15°	1086	1087	1087	1098	1097	306
25°	985	990	999	1018	1022	454
35°	846	857	879	908	915	529
45°	684	699	734	775	784	528
55°	516	532	577	603	600	463
65°	350	363	386	368	354	347
75°	189	199	186	161	152	200
85°	44	39	24	21	21	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1143.7	1143.7	1143.7	1143.7	1143.7
2.5°	1145.0	1142.3	1136.8	1143.7	1143.7
5°	1140.9	1138.1	1134.0	1140.9	1139.5
7.5°	1132.6	1129.9	1125.7	1134.0	1132.6
10°	1120.2	1118.8	1116.1	1124.3	1123.0
12.5°	1106.4	1105.0	1103.7	1111.9	1111.9
15°	1085.7	1087.1	1087.1	1098.1	1096.8
17.5°	1066.4	1067.8	1069.2	1083.0	1083.0
20°	1041.6	1043.0	1048.5	1063.6	1065.0
22.5°	1015.4	1016.7	1023.6	1041.6	1044.3
25°	985.0	990.5	998.8	1018.1	1022.3
27.5°	954.7	958.8	972.6	994.7	997.4
30°	918.8	927.1	942.2	967.1	972.6
32.5°	882.9	892.6	910.5	938.1	945.0
35°	845.7	856.7	878.8	907.8	914.7
37.5°	807.0	816.7	844.3	874.6	884.3
40°	768.4	778.1	808.4	842.9	854.0
42.5°	727.0	740.8	771.2	809.8	820.8
45°	684.3	699.4	733.9	775.3	783.6
47.5°	640.1	656.7	696.7	738.1	747.7
50°	601.5	616.7	656.7	696.7	703.6
52.5°	560.1	573.9	618.0	651.2	652.5
55°	516.0	532.5	576.7	602.9	600.1
57.5°	476.0	489.7	532.5	546.3	538.0
60°	433.2	445.6	488.4	489.7	477.3
62.5°	391.8	404.2	437.3	427.7	412.5
65°	350.4	362.8	386.3	368.3	354.5
67.5°	310.4	321.4	335.2	311.8	298.0
70°	267.6	282.8	284.2	256.6	242.8
72.5°	230.4	238.7	235.9	209.7	197.3
75°	189.0	198.7	186.2	161.4	151.8
77.5°	150.4	157.3	140.7	117.3	110.4
80°	111.7	115.9	96.6	78.6	74.5
82.5°	75.9	75.9	55.2	42.8	38.6
85°	44.1	38.6	23.5	20.7	20.7
87.5°	15.2	9.7	9.7	9.7	9.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)