

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: P258755

Luminaire Tested: **14CZ-LD5-39-S-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258755
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-3500K
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3382.0 lumens
Efficiency: N/A
Efficacy: 107.3 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

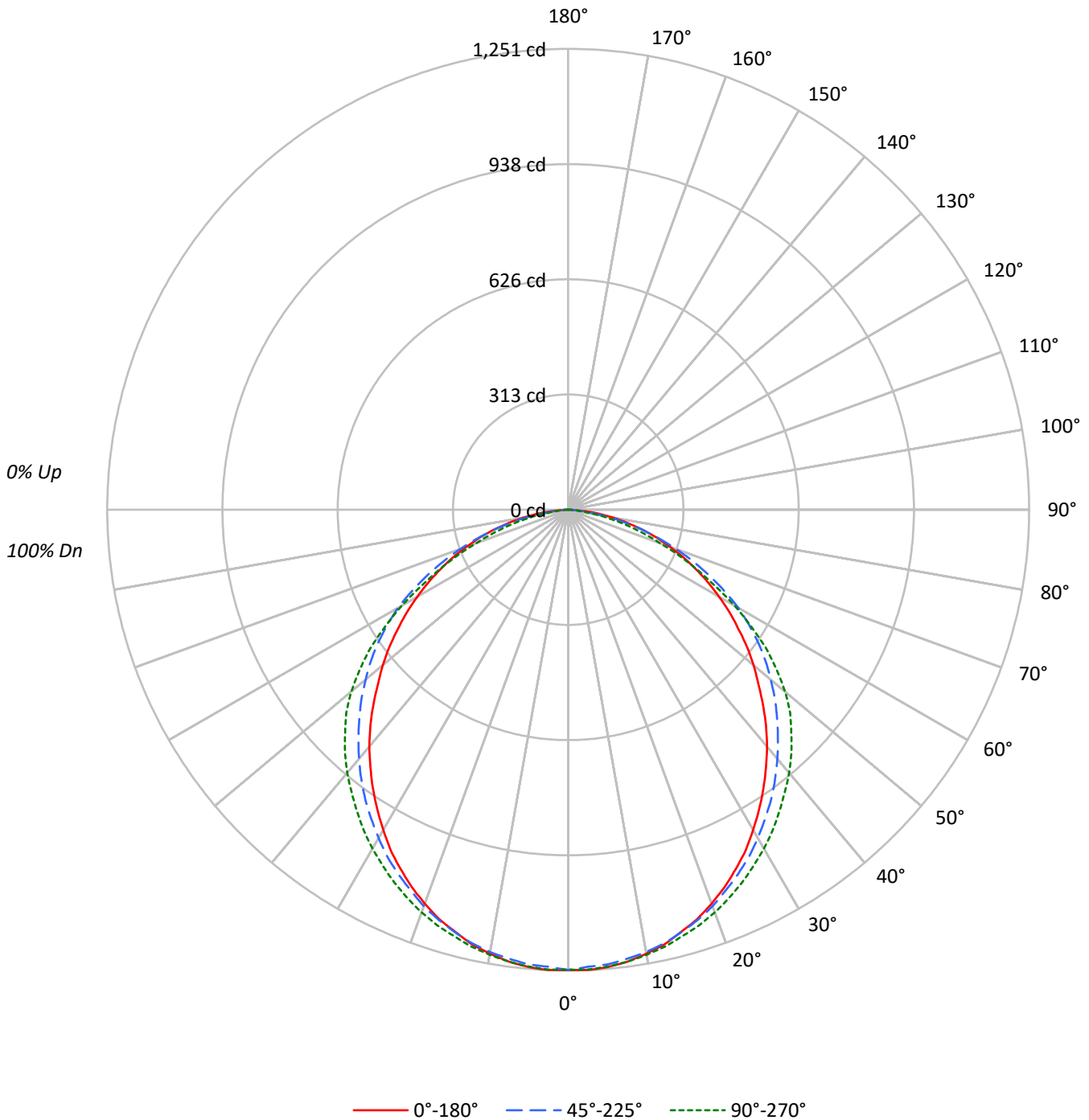
Input Watts (W): 31.527
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3362	3362	3362
5°	3367	3346	3363
10°	3344	3331	3352
15°	3304	3308	3338
20°	3258	3280	3332
25°	3195	3240	3316
30°	3119	3198	3301
35°	3035	3154	3282
40°	2949	3102	3277
45°	2845	3051	3258
50°	2751	3003	3218
55°	2644	2955	3075
60°	2547	2871	2806
65°	2437	2687	2466
70°	2301	2442	2087
75°	2147	2115	1724
80°	1892	1635	1261
85°	1488	790	698



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.0	3.5
10°-20°	336.3	9.9
20°-30°	504.7	14.9
30°-40°	601.7	17.8
40°-50°	619.8	18.3
50°-60°	552.3	16.3
60°-70°	398.0	11.8
70°-80°	208.1	6.2
80°-90°	43.0	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°	959.1	28.4
0°-40°	1560.7	46.1
0°-60°	2732.8	80.8
0°-90°	3382.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3382.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1249	1249	1249	1249	1249	
5°	1246	1243	1239	1246	1245	118
15°	1186	1188	1188	1200	1198	335
25°	1076	1082	1091	1112	1117	496
35°	924	936	960	992	999	578
45°	748	764	802	847	856	577
55°	564	582	630	659	656	505
65°	383	396	422	402	387	379
75°	206	217	203	176	166	219
85°	48	42	26	23	23	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1249.3	1249.3	1249.3	1249.3	1249.3
2.5°	1250.8	1247.8	1241.8	1249.3	1249.3
5°	1246.3	1243.3	1238.8	1246.3	1244.8
7.5°	1237.3	1234.2	1229.7	1238.8	1237.3
10°	1223.7	1222.2	1219.2	1228.2	1226.7
12.5°	1208.6	1207.1	1205.6	1214.7	1214.7
15°	1186.0	1187.5	1187.5	1199.6	1198.1
17.5°	1164.9	1166.4	1167.9	1183.0	1183.0
20°	1137.8	1139.3	1145.3	1161.9	1163.4
22.5°	1109.2	1110.7	1118.2	1137.8	1140.8
25°	1076.0	1082.0	1091.1	1112.2	1116.7
27.5°	1042.9	1047.4	1062.4	1086.6	1089.6
30°	1003.7	1012.7	1029.3	1056.4	1062.4
32.5°	964.5	975.0	994.6	1024.8	1032.3
35°	923.8	935.9	960.0	991.6	999.1
37.5°	881.6	892.2	922.3	955.4	966.0
40°	839.4	850.0	883.1	920.8	932.8
42.5°	794.2	809.3	842.4	884.6	896.7
45°	747.5	764.1	801.7	846.9	856.0
47.5°	699.3	717.3	761.0	806.3	816.8
50°	657.1	673.6	717.3	761.0	768.6
52.5°	611.8	626.9	675.1	711.3	712.8
55°	563.6	581.7	629.9	658.6	655.5
57.5°	519.9	535.0	581.7	596.8	587.7
60°	473.2	486.8	533.5	535.0	521.4
62.5°	428.0	441.6	477.7	467.2	450.6
65°	382.8	396.3	422.0	402.4	387.3
67.5°	339.1	351.1	366.2	340.6	325.5
70°	292.4	308.9	310.4	280.3	265.2
72.5°	251.7	260.7	257.7	229.1	215.5
75°	206.5	217.0	203.4	176.3	165.8
77.5°	164.3	171.8	153.7	128.1	120.6
80°	122.1	126.6	105.5	85.9	81.4
82.5°	82.9	82.9	60.3	46.7	42.2
85°	48.2	42.2	25.6	22.6	22.6
87.5°	16.6	10.5	10.5	10.5	10.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)