

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: P258588

Luminaire Tested: **14CZ-LD5-39-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258588
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35573)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ-LD5-39-UNV-L93050-W2A1-U-4000K
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3581.0 lumens
Efficiency: N/A
Efficacy: 112.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

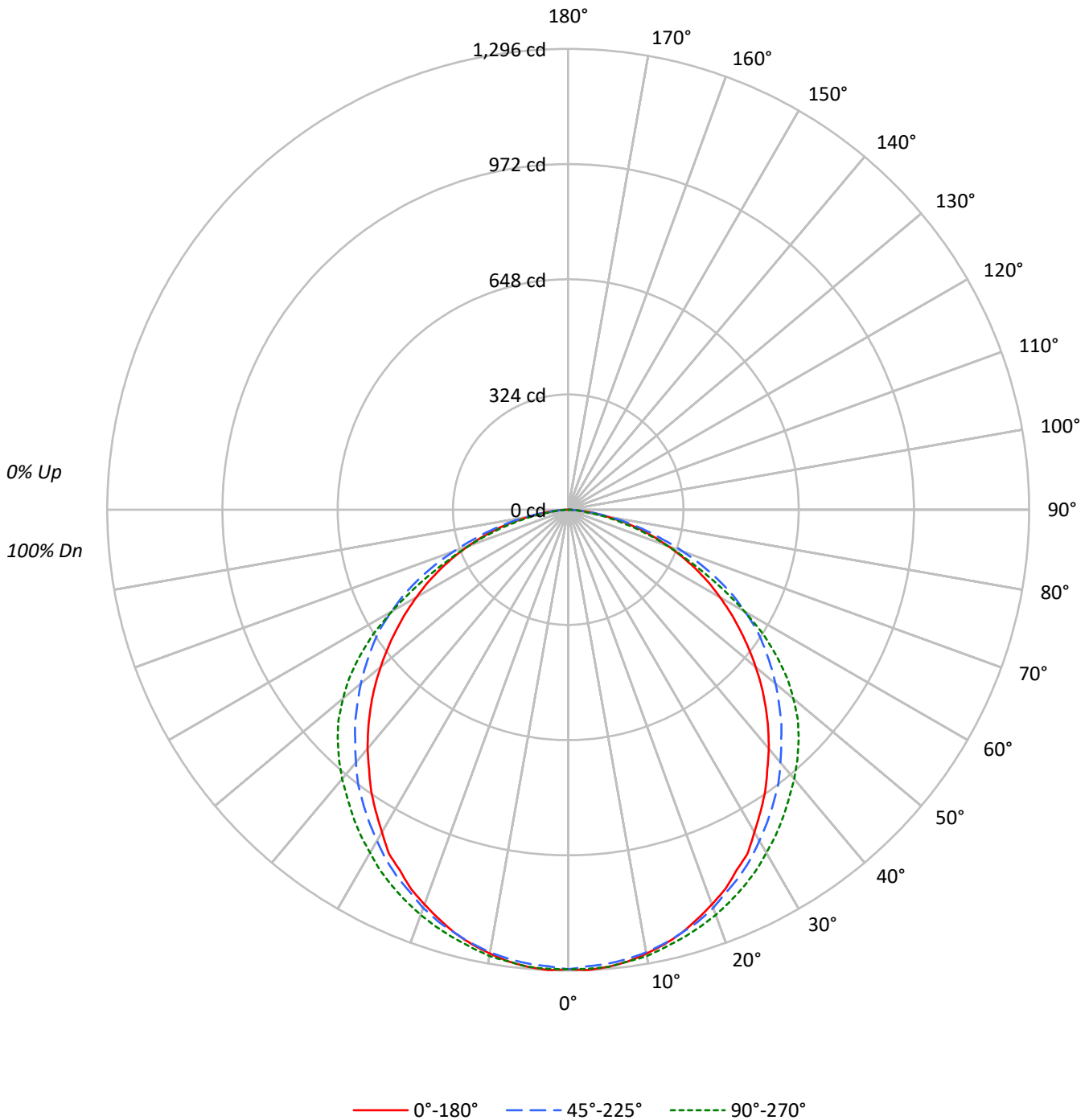
Input Watts (W): 31.806
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	90	80	72	66	88	78	71	65	75	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	36	34
8	61	47	39	33	59	46	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	29	42	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3478	3478	3478
5°	3486	3462	3486
10°	3464	3454	3483
15°	3433	3433	3472
20°	3382	3413	3473
25°	3323	3381	3470
30°	3253	3341	3462
35°	3172	3306	3462
40°	3082	3262	3473
45°	2990	3225	3487
50°	2882	3185	3459
55°	2766	3156	3346
60°	2651	3088	3078
65°	2529	2956	2698
70°	2348	2695	2334
75°	2129	2350	1928
80°	1697	1860	1423
85°	1198	1034	818



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.3	3.4
10°-20°	349.3	9.8
20°-30°	526.7	14.7
30°-40°	631.3	17.6
40°-50°	655.1	18.3
50°-60°	590.9	16.5
60°-70°	431.0	12.0
70°-80°	226.2	6.3
80°-90°	48.2	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°	998.3	27.9
0°-40°	1629.5	45.5
0°-60°	2875.6	80.3
0°-90°	3581.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3581.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1292	1292	1292	1292	1292	
5°	1290	1287	1282	1290	1290	122
15°	1232	1232	1232	1246	1246	347
25°	1119	1125	1139	1163	1169	517
35°	966	976	1006	1043	1054	603
45°	786	802	847	899	916	606
55°	590	611	673	717	713	528
65°	397	420	464	447	424	393
75°	205	233	226	196	185	215
85°	39	48	34	28	26	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1292.3	1292.3	1292.3	1292.3	1292.3
2.5°	1295.8	1292.3	1285.2	1292.3	1292.3
5°	1290.5	1287.0	1281.7	1290.5	1290.5
7.5°	1281.7	1278.2	1274.6	1283.5	1281.7
10°	1267.6	1265.8	1264.0	1274.6	1274.6
12.5°	1251.7	1251.7	1249.9	1262.3	1260.5
15°	1232.3	1232.3	1232.3	1246.4	1246.4
17.5°	1207.5	1211.1	1214.6	1230.5	1230.5
20°	1181.1	1184.6	1191.7	1211.1	1212.8
22.5°	1154.6	1156.3	1163.4	1186.4	1191.7
25°	1119.3	1124.6	1138.7	1163.4	1168.7
27.5°	1091.0	1092.8	1108.7	1136.9	1144.0
30°	1046.9	1059.2	1075.1	1106.9	1114.0
32.5°	1006.3	1016.9	1041.6	1075.1	1085.7
35°	965.7	976.3	1006.3	1043.4	1054.0
37.5°	919.8	935.7	971.0	1008.1	1020.4
40°	877.4	891.5	928.6	974.5	988.6
42.5°	831.5	845.6	886.2	937.4	953.3
45°	785.6	801.5	847.4	898.6	916.2
47.5°	737.9	755.6	803.3	859.8	875.6
50°	688.5	707.9	760.9	819.2	826.2
52.5°	639.1	660.3	716.8	768.0	775.0
55°	589.6	610.8	672.6	716.8	713.2
57.5°	542.0	564.9	628.5	651.4	647.9
60°	492.5	517.3	573.8	584.4	572.0
62.5°	446.6	469.6	522.6	513.7	497.8
65°	397.2	420.2	464.3	446.6	423.7
67.5°	347.8	376.0	404.3	374.3	356.6
70°	298.4	330.1	342.5	312.5	296.6
72.5°	250.7	284.2	280.7	250.7	240.1
75°	204.8	233.0	226.0	196.0	185.4
77.5°	155.4	187.1	171.2	146.5	137.7
80°	109.5	137.7	120.0	98.9	91.8
82.5°	72.4	91.8	74.1	58.3	53.0
85°	38.8	47.7	33.5	28.2	26.5
87.5°	15.9	14.1	12.4	12.4	10.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)