

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: P258559

Luminaire Tested: **14CZ-LD5-39-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258559
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-L83050-W2A1-U-4500K
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED AT 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4135.1 lumens
Efficiency: N/A
Efficacy: 127.4 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

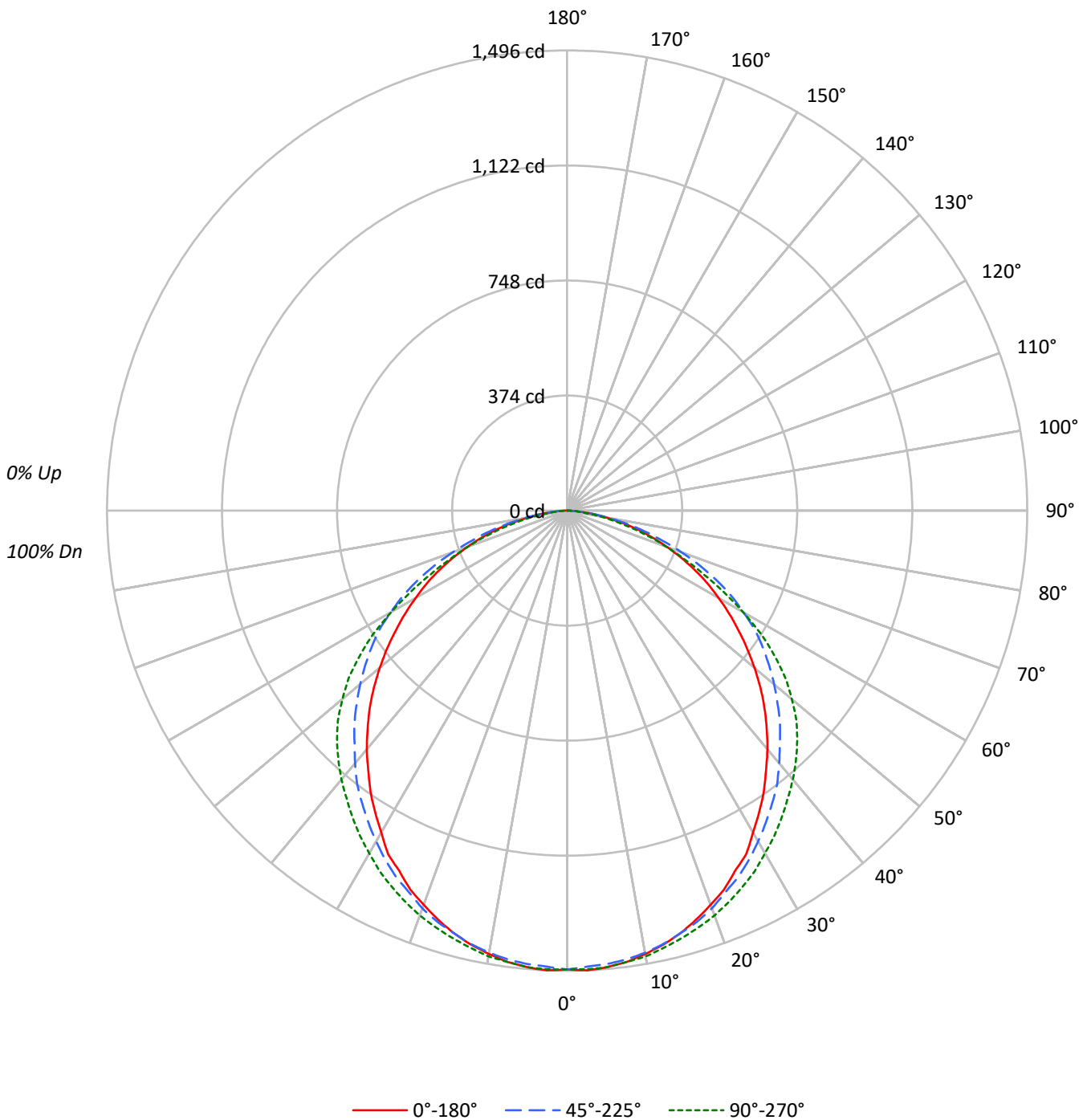
Input Watts (W): 32.457
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4015	4015	4015
5°	4025	3998	4025
10°	4000	3988	4022
15°	3964	3964	4009
20°	3905	3940	4011
25°	3837	3904	4007
30°	3756	3858	3997
35°	3663	3817	3998
40°	3559	3767	4010
45°	3452	3724	4026
50°	3328	3678	3994
55°	3194	3644	3864
60°	3061	3566	3555
65°	2921	3414	3116
70°	2710	3112	2695
75°	2459	2713	2225
80°	1959	2148	1643
85°	1383	1195	945



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.2	3.4
10°-20°	403.3	9.8
20°-30°	608.2	14.7
30°-40°	729.0	17.6
40°-50°	756.5	18.3
50°-60°	682.3	16.5
60°-70°	497.7	12.0
70°-80°	261.1	6.3
80°-90°	55.7	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°	1152.7	27.9
0°-40°	1881.7	45.5
0°-60°	3320.5	80.3
0°-90°	4135.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4135.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1492	1492	1492	1492	1492	
5°	1490	1486	1480	1490	1490	141
15°	1423	1423	1423	1439	1439	401
25°	1292	1299	1315	1343	1350	596
35°	1115	1127	1162	1205	1217	696
45°	907	926	978	1038	1058	699
55°	681	705	777	828	824	610
65°	459	485	536	516	489	453
75°	236	269	261	226	214	248
85°	45	55	39	33	31	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1492.2	1492.2	1492.2	1492.2	1492.2
2.5°	1496.3	1492.2	1484.1	1492.2	1492.2
5°	1490.2	1486.1	1480.0	1490.2	1490.2
7.5°	1480.0	1475.9	1471.8	1482.0	1480.0
10°	1463.7	1461.6	1459.6	1471.8	1471.8
12.5°	1445.3	1445.3	1443.3	1457.6	1455.5
15°	1422.9	1422.9	1422.9	1439.2	1439.2
17.5°	1394.4	1398.5	1402.5	1420.9	1420.9
20°	1363.8	1367.9	1376.0	1398.5	1400.5
22.5°	1333.2	1335.3	1343.4	1369.9	1376.0
25°	1292.4	1298.6	1314.9	1343.4	1349.5
27.5°	1259.8	1261.9	1280.2	1312.8	1321.0
30°	1208.9	1223.1	1241.5	1278.2	1286.3
32.5°	1162.0	1174.2	1202.8	1241.5	1253.7
35°	1115.1	1127.3	1162.0	1204.8	1217.0
37.5°	1062.1	1080.4	1121.2	1164.0	1178.3
40°	1013.2	1029.5	1072.3	1125.3	1141.6
42.5°	960.2	976.5	1023.4	1082.5	1100.8
45°	907.2	925.5	978.5	1037.6	1058.0
47.5°	852.1	872.5	927.5	992.8	1011.1
50°	795.0	817.5	878.6	945.9	954.0
52.5°	738.0	762.4	827.7	886.8	894.9
55°	680.9	705.3	776.7	827.7	823.6
57.5°	625.8	652.3	725.7	752.2	748.2
60°	568.8	597.3	662.5	674.8	660.5
62.5°	515.8	542.3	603.4	593.2	574.9
65°	458.7	485.2	536.1	515.8	489.3
67.5°	401.6	434.2	466.8	432.2	411.8
70°	344.5	381.2	395.5	360.8	342.5
72.5°	289.5	328.2	324.1	289.5	277.2
75°	236.5	269.1	260.9	226.3	214.0
77.5°	179.4	216.1	197.7	169.2	159.0
80°	126.4	159.0	138.6	114.2	106.0
82.5°	83.6	106.0	85.6	67.3	61.2
85°	44.8	55.0	38.7	32.6	30.6
87.5°	18.3	16.3	14.3	14.3	12.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)