

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: P258725

Luminaire Tested: **14CZ-LD5-39-S-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258725
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-L83050-W2A1-U-3500K
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3979.0 lumens
Efficiency: N/A
Efficacy: 128.5 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

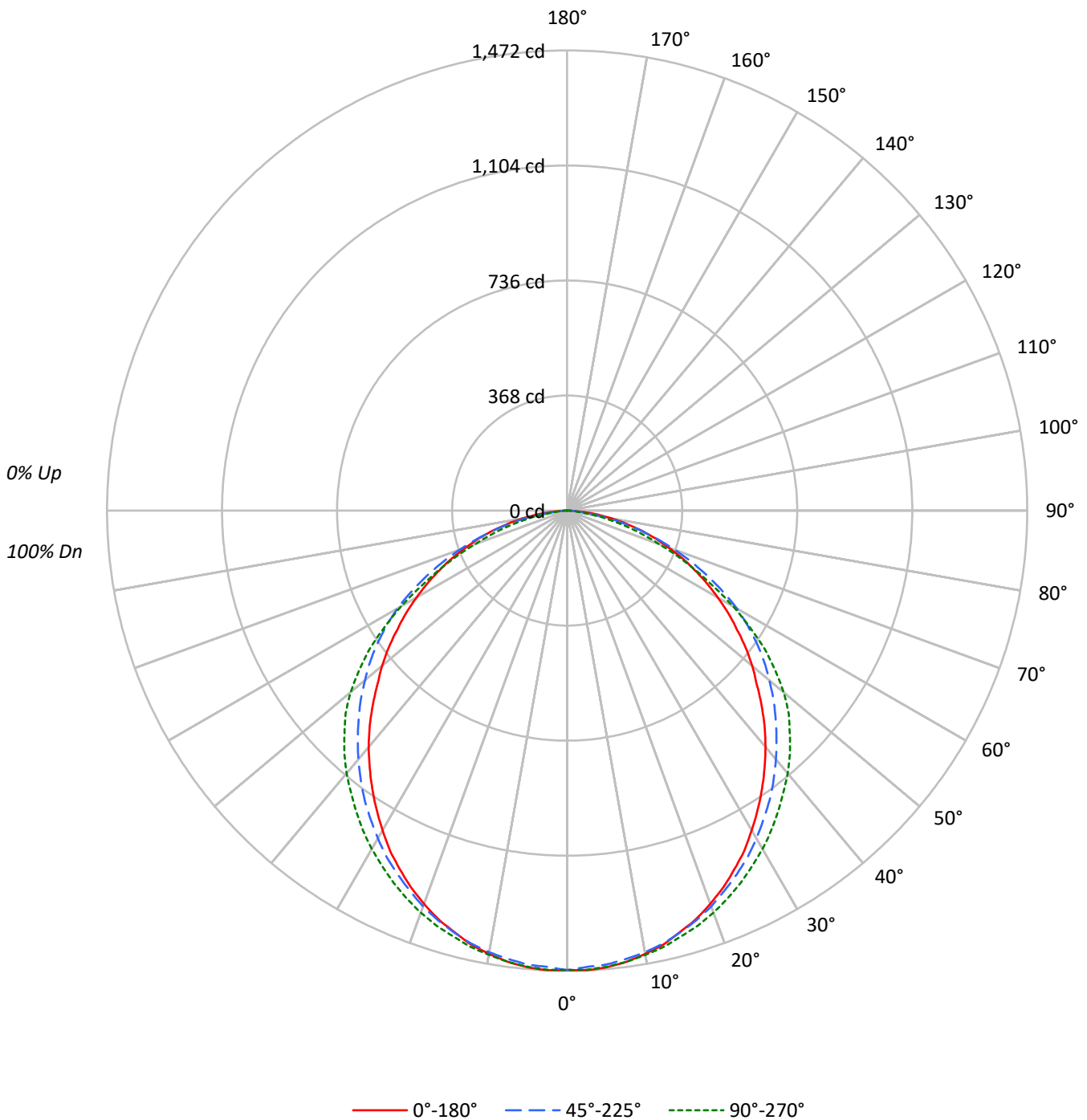
Input Watts (W): 30.969
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	109	105	100	97	106	102	98	95	98	95	92	94	92	89	91	89	87	85					85			
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71					71			
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60					60			
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51					51			
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44					44			
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39					39			
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34					34			
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31					31			
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28					28			
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25					25			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3955	3955	3955
5°	3961	3937	3956
10°	3934	3919	3944
15°	3887	3892	3927
20°	3833	3859	3920
25°	3759	3812	3901
30°	3669	3763	3884
35°	3571	3710	3862
40°	3469	3650	3855
45°	3347	3590	3833
50°	3236	3533	3786
55°	3111	3477	3619
60°	2996	3378	3302
65°	2868	3161	2902
70°	2707	2873	2456
75°	2525	2489	2027
80°	2225	1923	1483
85°	1751	929	821



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.9	3.5
10°-20°	395.7	9.9
20°-30°	593.8	14.9
30°-40°	707.9	17.8
40°-50°	729.2	18.3
50°-60°	649.8	16.3
60°-70°	468.2	11.8
70°-80°	244.9	6.2
80°-90°	50.6	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°	1128.3	28.4
0°-40°	1836.3	46.1
0°-60°	3215.3	80.8
0°-90°	3979.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3979.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1470	1470	1470	1470	1470	
5°	1466	1463	1457	1466	1464	139
15°	1395	1397	1397	1411	1410	394
25°	1266	1273	1284	1308	1314	583
35°	1087	1101	1129	1167	1176	680
45°	879	899	943	996	1007	679
55°	663	684	741	775	771	595
65°	450	466	496	473	456	446
75°	243	255	239	207	195	257
85°	57	50	30	27	27	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1469.9	1469.9	1469.9	1469.9	1469.9
2.5°	1471.6	1468.1	1461.0	1469.9	1469.9
5°	1466.3	1462.8	1457.4	1466.3	1464.5
7.5°	1455.7	1452.1	1446.8	1457.4	1455.7
10°	1439.7	1437.9	1434.4	1445.0	1443.3
12.5°	1422.0	1420.2	1418.4	1429.1	1429.1
15°	1395.4	1397.2	1397.2	1411.3	1409.6
17.5°	1370.6	1372.3	1374.1	1391.8	1391.8
20°	1338.6	1340.4	1347.5	1367.0	1368.8
22.5°	1305.0	1306.7	1315.6	1338.6	1342.2
25°	1266.0	1273.0	1283.7	1308.5	1313.8
27.5°	1226.9	1232.3	1250.0	1278.4	1281.9
30°	1180.8	1191.5	1211.0	1242.9	1250.0
32.5°	1134.7	1147.2	1170.2	1205.7	1214.5
35°	1086.9	1101.1	1129.4	1166.7	1175.5
37.5°	1037.2	1049.6	1085.1	1124.1	1136.5
40°	987.6	1000.0	1039.0	1083.3	1097.5
42.5°	934.4	952.1	991.1	1040.8	1055.0
45°	879.4	898.9	943.3	996.4	1007.1
47.5°	822.7	844.0	895.4	948.6	961.0
50°	773.0	792.5	844.0	895.4	904.3
52.5°	719.9	737.6	794.3	836.9	838.6
55°	663.1	684.4	741.1	774.8	771.3
57.5°	611.7	629.4	684.4	702.1	691.5
60°	556.7	572.7	627.7	629.4	613.5
62.5°	503.5	519.5	562.1	549.6	530.1
65°	450.4	466.3	496.5	473.4	455.7
67.5°	398.9	413.1	430.8	400.7	383.0
70°	344.0	363.5	365.2	329.8	312.1
72.5°	296.1	306.7	303.2	269.5	253.5
75°	242.9	255.3	239.4	207.4	195.0
77.5°	193.3	202.1	180.9	150.7	141.8
80°	143.6	148.9	124.1	101.1	95.7
82.5°	97.5	97.5	70.9	55.0	49.6
85°	56.7	49.6	30.1	26.6	26.6
87.5°	19.5	12.4	12.4	12.4	12.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)