

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: P388869

Luminaire Tested: **24CZ2-55VHE-UNV-L930-CD1-SDWPD1-U**

Issue Date: 2/28/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P388869
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-55VHE-UNV-L930-CD1-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4483.9 lumens
Efficiency: N/A
Efficacy: 124.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

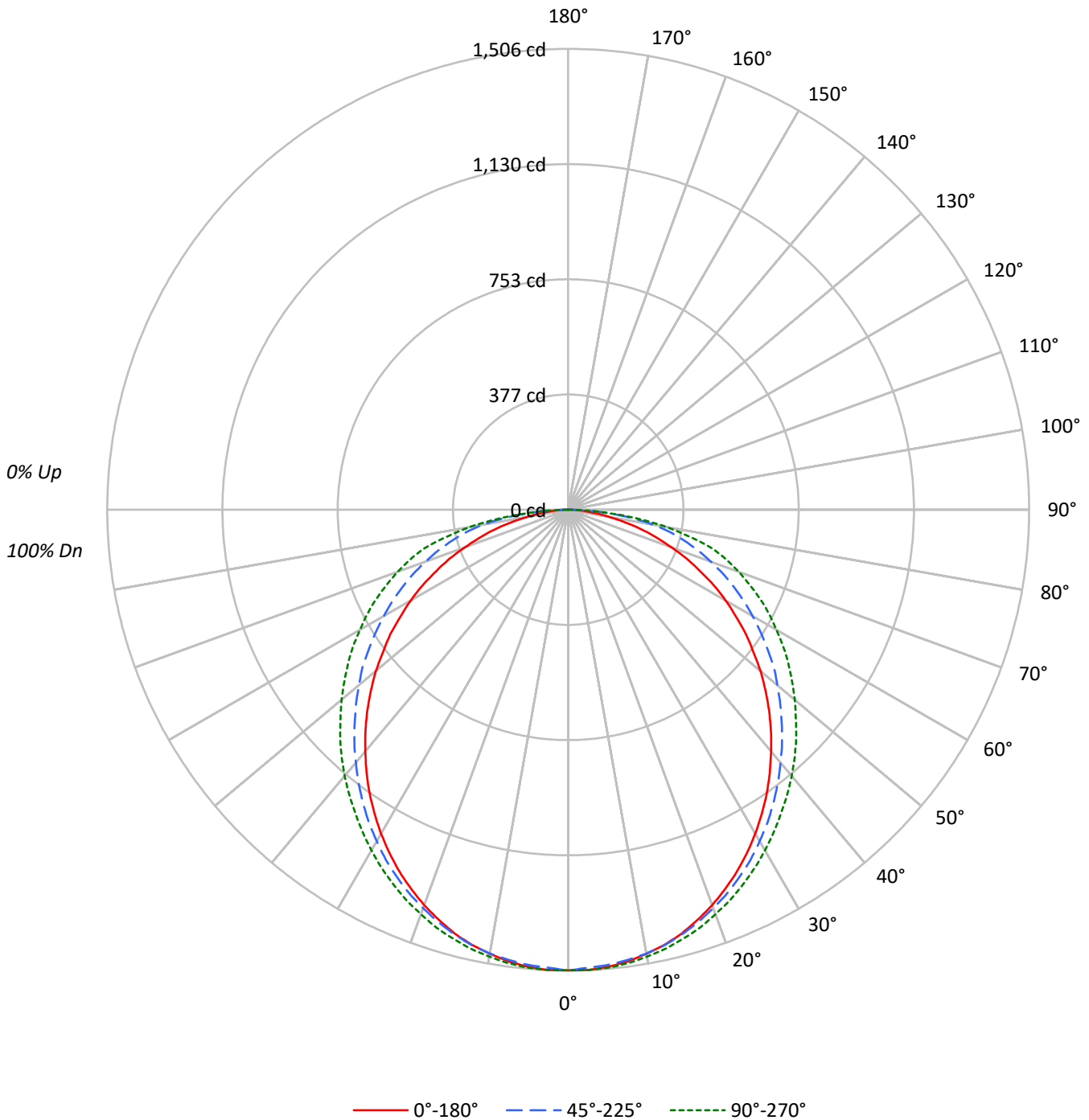
Input Watts (W): 36.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2026	2026	2026
5°	2025	2017	2029
10°	2014	2012	2026
15°	1997	2001	2022
20°	1969	1984	2014
25°	1937	1966	2006
30°	1899	1944	1997
35°	1858	1920	1991
40°	1811	1895	1995
45°	1765	1877	2005
50°	1717	1867	2024
55°	1664	1864	2061
60°	1599	1873	2114
65°	1515	1901	2206
70°	1407	1948	2331
75°	1284	2046	2529
80°	1055	2203	2528
85°	809	2033	2172



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.4	3.2
10°-20°	406.5	9.1
20°-30°	611.7	13.6
30°-40°	733.0	16.3
40°-50°	763.9	17.0
50°-60°	710.7	15.9
60°-70°	585.4	13.1
70°-80°	398.7	8.9
80°-90°	131.6	2.9
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°	1160.6	25.9
0°-40°	1893.6	42.2
0°-60°	3368.2	75.1
0°-90°	4483.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4483.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1506	1506	1506	1506	1506	
5°	1500	1500	1494	1501	1502	142
15°	1434	1435	1437	1450	1452	404
25°	1305	1311	1324	1347	1351	601
35°	1131	1145	1169	1200	1212	707
45°	928	947	986	1036	1054	716
55°	709	733	795	858	878	632
65°	476	516	597	667	693	472
75°	247	302	394	464	486	260
85°	52	102	132	141	141	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1505.5	1505.5	1505.5	1505.5	1505.5
2.5°	1505.5	1505.5	1498.0	1505.5	1505.5
5°	1499.5	1499.5	1493.5	1501.0	1502.5
7.5°	1489.0	1490.5	1484.5	1493.5	1495.0
10°	1474.0	1475.5	1472.5	1481.5	1483.0
12.5°	1456.1	1457.6	1457.6	1468.0	1469.5
15°	1433.6	1435.1	1436.6	1450.1	1451.6
17.5°	1405.2	1409.7	1412.7	1429.1	1432.1
20°	1375.3	1379.7	1385.7	1403.7	1406.7
22.5°	1340.8	1346.8	1357.3	1376.8	1381.2
25°	1304.9	1310.9	1324.4	1346.8	1351.3
27.5°	1264.5	1273.5	1290.0	1313.9	1319.9
30°	1222.6	1231.6	1251.1	1276.5	1285.5
32.5°	1177.7	1189.7	1212.1	1240.6	1249.6
35°	1131.3	1144.8	1168.7	1200.2	1212.1
37.5°	1082.0	1096.9	1125.3	1159.8	1174.7
40°	1031.1	1049.0	1079.0	1119.4	1135.8
42.5°	980.2	996.7	1034.1	1077.5	1095.4
45°	927.8	947.3	986.2	1035.6	1053.5
47.5°	873.9	893.4	939.8	992.2	1008.6
50°	820.1	839.5	891.9	947.3	966.7
52.5°	761.7	787.1	847.0	902.4	921.8
55°	709.3	733.3	794.6	857.5	878.4
57.5°	649.5	677.9	745.2	811.1	833.5
60°	594.1	624.0	695.9	763.2	785.6
62.5°	537.2	570.2	646.5	715.3	740.8
65°	475.9	516.3	597.1	667.4	692.9
67.5°	420.5	462.4	547.7	619.5	642.0
70°	357.7	408.5	495.3	567.2	592.6
72.5°	303.8	354.7	445.9	516.3	541.7
75°	246.9	302.3	393.6	463.9	486.4
77.5°	190.1	251.4	342.7	396.6	404.0
80°	136.2	200.5	284.3	315.8	326.2
82.5°	95.8	154.1	209.5	230.5	236.4
85°	52.4	101.8	131.7	140.7	140.7
87.5°	22.4	43.4	52.4	53.9	55.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)