

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: P389733

Luminaire Tested: **24CZ2-40VHE-S-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: P389733
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-40VHE-S-UNV-L930-CD1-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3418.9 lumens
Efficiency: N/A
Efficacy: 130.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

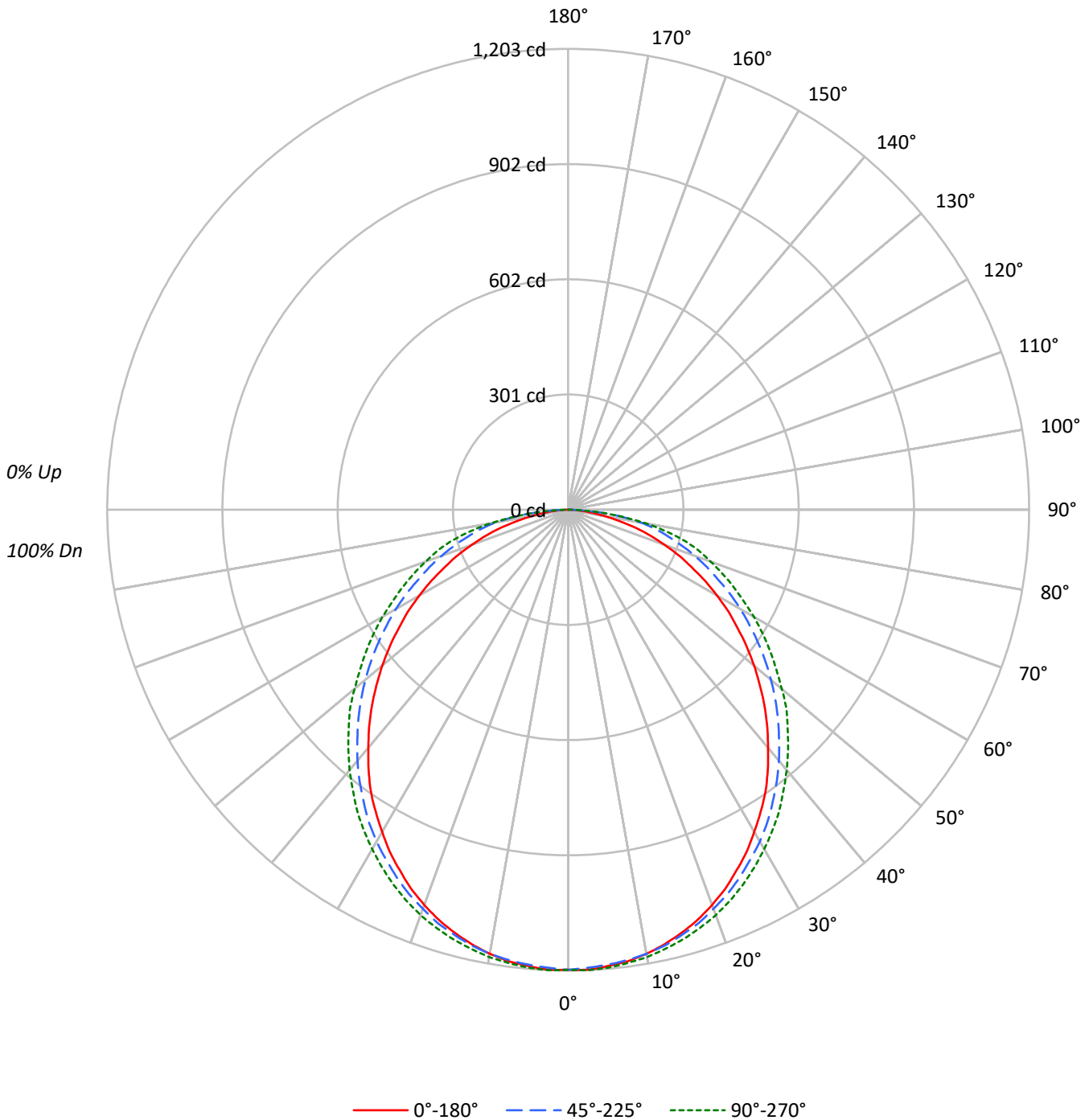
Input Watts (W): 26.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P389733

CATALOG NUMBER: 24CZ2-40VHE-S-UNV-L930-CD1-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P389733

CATALOG NUMBER: 24CZ2-40VHE-S-UNV-L930-CD1-SDWPD1-U

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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1616	1616	1616
5°	1615	1610	1621
10°	1608	1608	1620
15°	1593	1601	1617
20°	1572	1588	1613
25°	1543	1572	1603
30°	1508	1554	1589
35°	1475	1529	1577
40°	1425	1503	1558
45°	1378	1473	1541
50°	1325	1446	1523
55°	1266	1419	1508
60°	1207	1397	1505
65°	1131	1372	1514
70°	1047	1380	1555
75°	937	1406	1643
80°	757	1489	1607
85°	570	1308	1274



TEST NUMBER: P389733

CATALOG NUMBER: 24CZ2-40VHE-S-UNV-L930-CD1-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.7	3.3
10°-20°	324.9	9.5
20°-30°	488.4	14.3
30°-40°	581.8	17.0
40°-50°	595.4	17.4
50°-60°	536.0	15.7
60°-70°	421.0	12.3
70°-80°	273.2	8.0
80°-90°	84.5	2.5
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°	927.0	27.1
0°-40°	1508.8	44.1
0°-60°	2640.2	77.2
0°-90°	3418.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3418.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1201	1201	1201	1201	1201	
5°	1196	1198	1192	1199	1200	114
15°	1144	1147	1149	1159	1161	322
25°	1039	1048	1059	1076	1080	479
35°	898	909	931	954	960	560
45°	724	742	774	804	810	558
55°	540	564	605	636	643	484
65°	355	382	431	467	476	353
75°	180	215	270	307	316	191
85°	37	68	85	82	82	45
90°	0	0	0	0	0	



TEST NUMBER: P389733

CATALOG NUMBER: 24CZ2-40VHE-S-UNV-L930-CD1-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1201.1	1201.1	1201.1	1201.1	1201.1
2.5°	1202.2	1202.2	1196.7	1202.2	1203.3
5°	1195.7	1197.8	1192.4	1198.9	1200.0
7.5°	1189.1	1189.1	1185.9	1192.4	1193.5
10°	1177.2	1178.3	1177.2	1184.8	1185.9
12.5°	1162.0	1164.2	1165.2	1172.8	1173.9
15°	1143.5	1146.8	1149.0	1158.7	1160.9
17.5°	1122.9	1126.2	1131.6	1142.4	1144.6
20°	1097.9	1102.3	1108.8	1122.9	1126.2
22.5°	1070.8	1075.1	1086.0	1099.0	1104.4
25°	1039.3	1048.0	1058.8	1076.2	1079.5
27.5°	1007.8	1015.4	1029.5	1048.0	1052.3
30°	970.9	982.8	1000.2	1018.6	1023.0
32.5°	935.0	947.0	967.6	987.1	992.6
35°	898.1	909.0	930.7	953.5	960.0
37.5°	855.7	869.9	893.8	916.6	923.1
40°	811.2	828.6	855.7	879.6	887.2
42.5°	768.9	787.3	814.5	840.5	849.2
45°	724.3	741.7	774.3	803.6	810.1
47.5°	678.7	698.3	733.0	762.4	773.2
50°	633.1	653.8	690.7	721.1	727.6
52.5°	587.5	609.2	648.3	680.9	684.2
55°	539.7	563.6	604.9	636.4	642.9
57.5°	496.3	516.9	561.4	594.0	601.6
60°	448.5	471.3	519.1	549.5	559.3
62.5°	402.9	426.8	476.7	507.1	515.8
65°	355.1	382.3	431.1	467.0	475.7
67.5°	313.8	339.9	392.0	426.8	435.5
70°	266.1	295.4	350.8	386.6	395.3
72.5°	224.8	255.2	310.6	345.3	358.4
75°	180.3	215.0	270.4	307.3	316.0
77.5°	136.8	177.0	233.5	261.7	261.7
80°	97.7	140.1	192.2	205.2	207.4
82.5°	64.1	105.3	142.3	141.2	141.2
85°	36.9	68.4	84.7	82.5	82.5
87.5°	14.1	28.2	30.4	30.4	29.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)