

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: P388345

Luminaire Tested: **22CZ2-50VHE-UNV-L935-CD1-SWPD1-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: P388345
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-50VHE-UNV-L935-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4254.3 lumens
Efficiency: N/A
Efficacy: 117.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

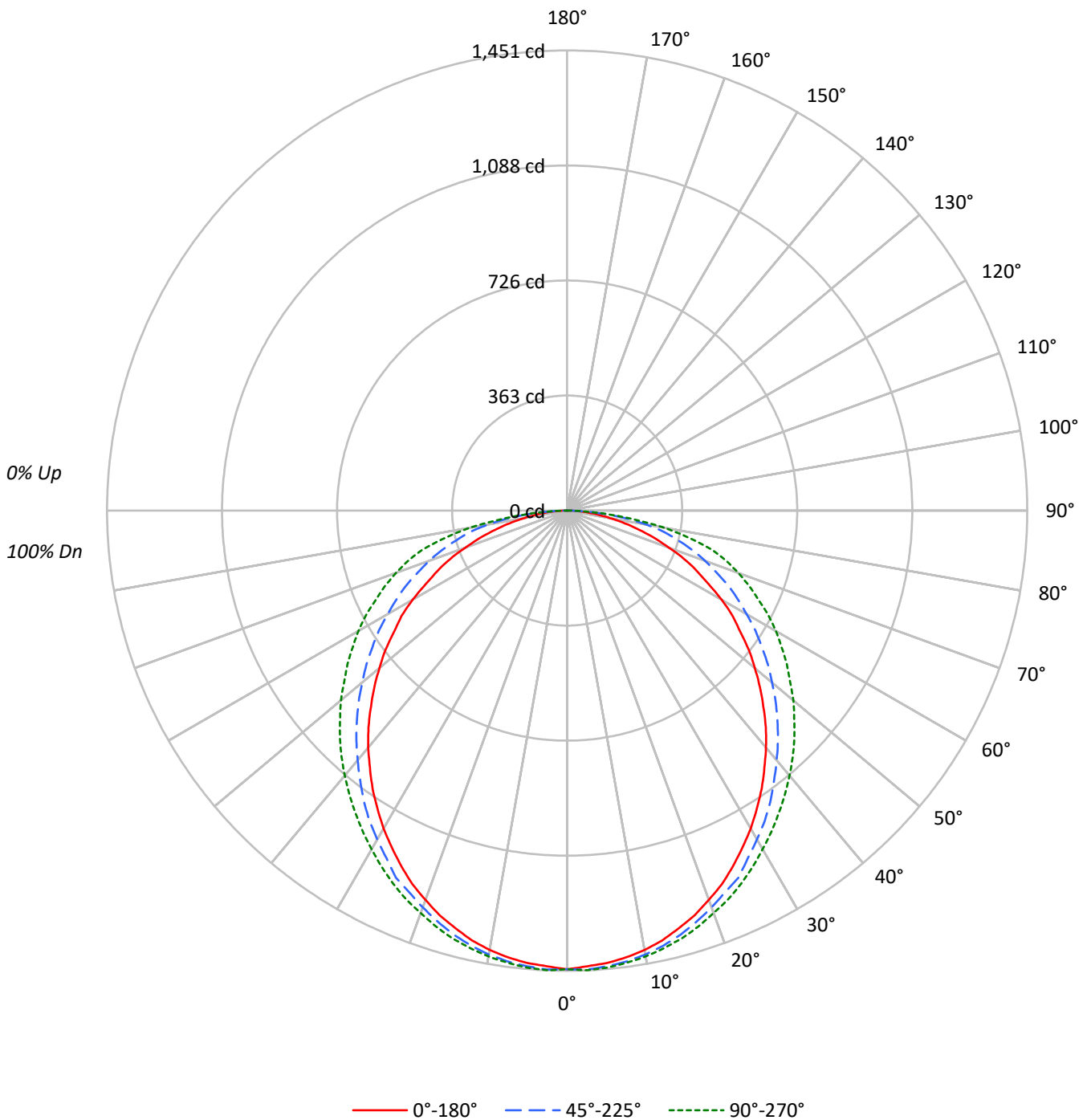
Input Watts (W): 36.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82					82			
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68					68			
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56					56			
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48					48			
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41					41			
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36					36			
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32					32			
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28					28			
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25					25			
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3893	3893	3893
5°	3868	3896	3907
10°	3844	3884	3901
15°	3797	3855	3890
20°	3741	3813	3867
25°	3673	3792	3854
30°	3597	3721	3831
35°	3514	3672	3824
40°	3427	3611	3831
45°	3330	3569	3856
50°	3234	3532	3900
55°	3123	3516	3968
60°	3031	3515	4090
65°	2879	3572	4239
70°	2685	3640	4513
75°	2460	3766	4875
80°	2142	3925	4801
85°	1874	3489	3813



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.8	3.2
10°-20°	389.7	9.2
20°-30°	585.0	13.7
30°-40°	699.0	16.4
40°-50°	726.8	17.1
50°-60°	673.6	15.8
60°-70°	552.6	13.0
70°-80°	373.5	8.8
80°-90°	117.4	2.8
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°	1111.4	26.1
0°-40°	1810.4	42.6
0°-60°	3210.8	75.5
0°-90°	4254.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4254.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1446	1446	1446	1446	1446	
5°	1432	1434	1442	1444	1446	136
15°	1363	1369	1384	1392	1396	384
25°	1237	1248	1277	1292	1298	570
35°	1070	1084	1118	1151	1164	669
45°	875	892	938	992	1013	676
55°	666	687	749	816	846	598
65°	452	477	561	634	666	447
75°	237	276	362	435	469	251
85°	61	84	113	126	124	69
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1446.5	1446.5	1446.5	1446.5	1446.5
2.5°	1438.2	1442.4	1448.6	1450.7	1450.7
5°	1431.9	1434.0	1442.4	1444.4	1446.5
7.5°	1421.4	1425.6	1434.0	1436.1	1438.2
10°	1406.8	1411.0	1421.4	1425.6	1427.7
12.5°	1387.9	1392.1	1404.7	1411.0	1413.0
15°	1362.8	1369.1	1383.7	1392.1	1396.3
17.5°	1337.7	1344.0	1358.6	1371.2	1375.4
20°	1306.3	1320.9	1331.4	1348.2	1350.2
22.5°	1274.9	1283.3	1302.1	1318.8	1327.2
25°	1237.2	1247.7	1277.0	1291.6	1297.9
27.5°	1197.4	1212.1	1235.1	1258.1	1266.5
30°	1157.7	1168.1	1197.4	1224.6	1233.0
32.5°	1113.7	1128.3	1159.7	1187.0	1199.5
35°	1069.7	1084.4	1117.9	1151.4	1163.9
37.5°	1021.6	1038.3	1071.8	1111.6	1128.3
40°	975.5	988.1	1027.9	1076.0	1090.7
42.5°	927.4	942.0	983.9	1036.2	1053.0
45°	875.0	891.8	937.8	992.3	1013.2
47.5°	824.8	841.5	891.8	946.2	971.3
50°	772.5	793.4	843.6	906.4	931.6
52.5°	722.2	741.1	797.6	862.5	885.5
55°	665.7	686.6	749.4	816.4	845.7
57.5°	619.6	634.3	703.4	772.5	801.8
60°	563.1	582.0	653.1	726.4	759.9
62.5°	502.4	533.8	607.1	682.4	715.9
65°	452.2	477.3	561.0	634.3	665.7
67.5°	399.8	427.1	508.7	586.2	621.7
70°	341.2	376.8	462.6	540.1	573.6
72.5°	288.9	326.6	414.5	489.9	525.4
75°	236.6	276.3	362.2	435.4	468.9
77.5°	186.3	230.3	314.0	370.5	391.5
80°	138.2	180.0	253.3	293.1	309.8
82.5°	96.3	131.9	186.3	207.2	211.4
85°	60.7	83.7	113.0	125.6	123.5
87.5°	27.2	33.5	41.9	46.1	44.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)