

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: P388346

Luminaire Tested: **22CZ2-50VHE-UNV-L935-CD1-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: P388346
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-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: 4307.7 lumens
Efficiency: N/A
Efficacy: 119.0 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

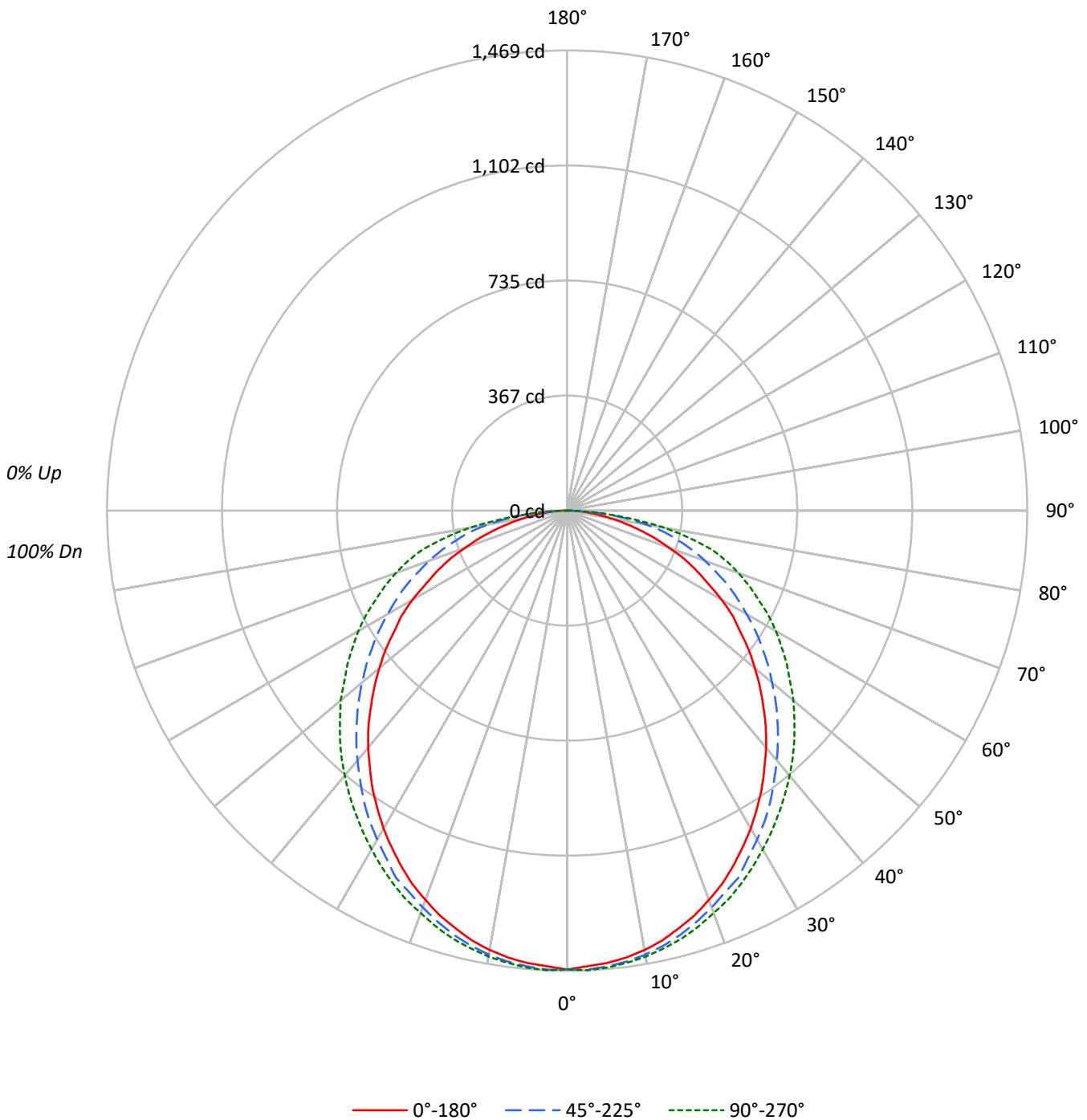
Input Watts (W): 36.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3941	3941	3941
5°	3917	3945	3957
10°	3892	3933	3950
15°	3844	3903	3939
20°	3788	3861	3915
25°	3719	3839	3902
30°	3642	3768	3879
35°	3558	3718	3871
40°	3470	3656	3880
45°	3372	3614	3904
50°	3275	3576	3949
55°	3163	3560	4017
60°	3069	3559	4141
65°	2916	3617	4292
70°	2718	3685	4570
75°	2490	3813	4937
80°	2168	3975	4861
85°	1899	3535	3863



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.5	3.2
10°-20°	394.5	9.2
20°-30°	592.3	13.7
30°-40°	707.7	16.4
40°-50°	735.9	17.1
50°-60°	682.1	15.8
60°-70°	559.5	13.0
70°-80°	378.2	8.8
80°-90°	118.9	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°	1125.4	26.1
0°-40°	1833.1	42.6
0°-60°	3251.2	75.5
0°-90°	4307.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4307.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1465	1465	1465	1465	1465	
5°	1450	1452	1460	1463	1465	138
15°	1380	1386	1401	1410	1414	389
25°	1253	1263	1293	1308	1314	577
35°	1083	1098	1132	1166	1178	677
45°	886	903	950	1005	1026	684
55°	674	695	759	827	856	606
65°	458	483	568	642	674	453
75°	240	280	367	441	475	254
85°	62	85	114	127	125	70
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1464.7	1464.7	1464.7	1464.7	1464.7
2.5°	1456.2	1460.5	1466.8	1468.9	1468.9
5°	1449.9	1452.0	1460.5	1462.6	1464.7
7.5°	1439.3	1443.5	1452.0	1454.1	1456.2
10°	1424.4	1428.7	1439.3	1443.5	1445.6
12.5°	1405.3	1409.6	1422.3	1428.7	1430.8
15°	1379.9	1386.3	1401.1	1409.6	1413.8
17.5°	1354.5	1360.8	1375.7	1388.4	1392.6
20°	1322.7	1337.5	1348.1	1365.1	1367.2
22.5°	1290.9	1299.4	1318.4	1335.4	1343.9
25°	1252.7	1263.3	1293.0	1307.8	1314.2
27.5°	1212.5	1227.3	1250.6	1273.9	1282.4
30°	1172.2	1182.8	1212.5	1240.0	1248.5
32.5°	1127.7	1142.5	1174.3	1201.9	1214.6
35°	1083.2	1098.0	1131.9	1165.8	1178.5
37.5°	1034.4	1051.4	1085.3	1125.5	1142.5
40°	987.8	1000.5	1040.8	1089.5	1104.4
42.5°	939.0	953.9	996.2	1049.2	1066.2
45°	886.0	903.0	949.6	1004.7	1025.9
47.5°	835.2	852.1	903.0	958.1	983.5
50°	782.2	803.4	854.2	917.8	943.3
52.5°	731.3	750.4	807.6	873.3	896.6
55°	674.1	695.3	758.8	826.7	856.3
57.5°	627.4	642.3	712.2	782.2	811.8
60°	570.2	589.3	661.3	735.5	769.4
62.5°	508.7	540.5	614.7	691.0	724.9
65°	457.9	483.3	568.1	642.3	674.1
67.5°	404.9	432.4	515.1	593.5	629.5
70°	345.5	381.5	468.4	546.9	580.8
72.5°	292.5	330.7	419.7	496.0	532.0
75°	239.5	279.8	366.7	440.9	474.8
77.5°	188.7	233.2	318.0	375.2	396.4
80°	139.9	182.3	256.5	296.8	313.7
82.5°	97.5	133.5	188.7	209.8	214.1
85°	61.5	84.8	114.5	127.2	125.1
87.5°	27.6	33.9	42.4	46.6	44.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)