

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: P389258

Luminaire Tested: **22CZ2-44VHE-S-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: P389258
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-44VHE-S-UNV-L935-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4104.3 lumens
Efficiency: N/A
Efficacy: 125.9 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

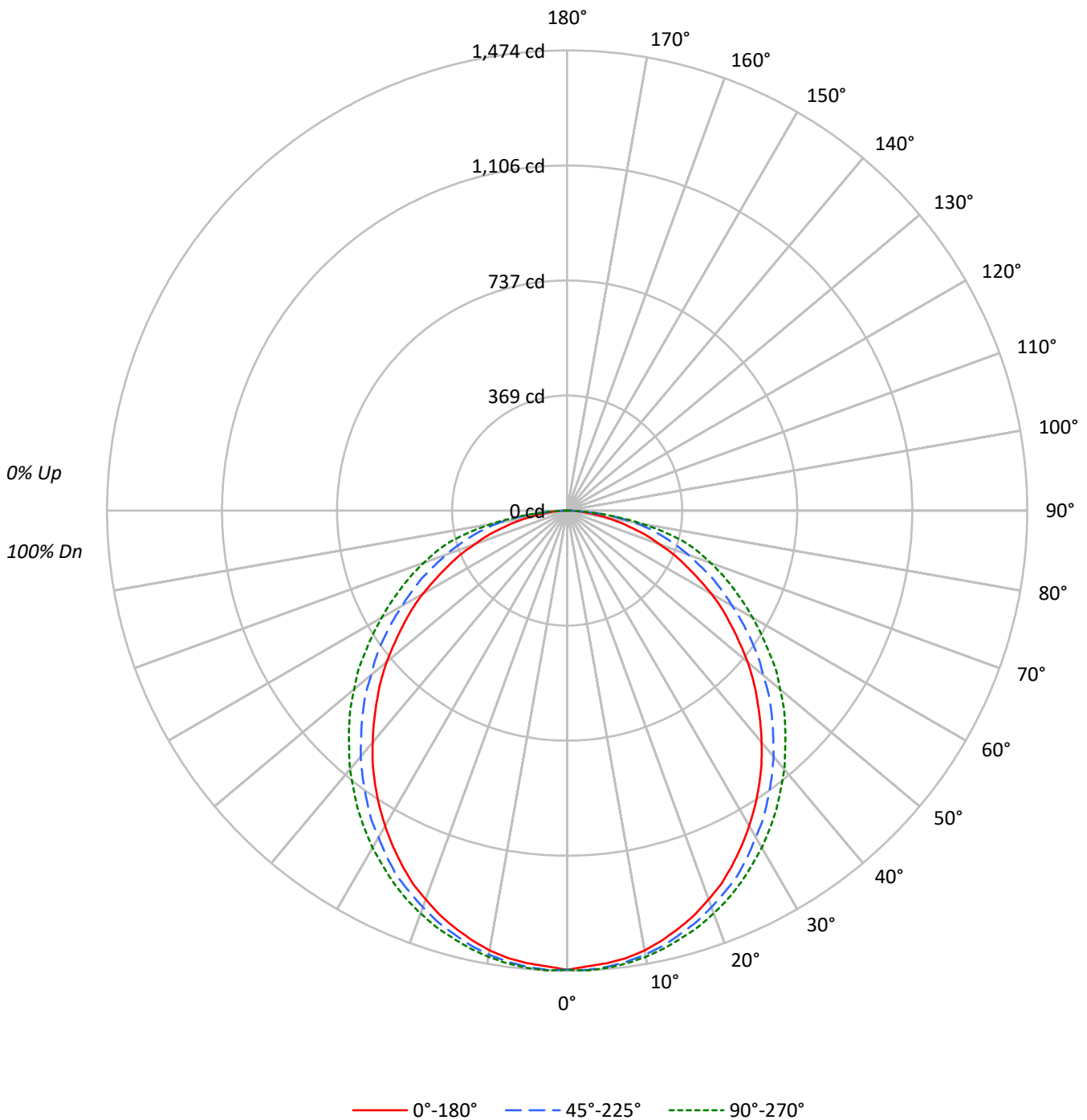
Input Watts (W): 32.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3958	3958	3958
5°	3931	3962	3973
10°	3909	3945	3966
15°	3857	3911	3948
20°	3795	3872	3932
25°	3719	3832	3906
30°	3624	3755	3874
35°	3523	3687	3837
40°	3404	3612	3801
45°	3279	3527	3760
50°	3159	3431	3728
55°	3010	3369	3702
60°	2876	3288	3690
65°	2683	3268	3731
70°	2471	3239	3842
75°	2230	3285	4041
80°	1929	3383	3798
85°	1596	2837	2837



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.1	3.4
10°-20°	395.8	9.6
20°-30°	592.2	14.4
30°-40°	701.3	17.1
40°-50°	714.7	17.4
50°-60°	640.6	15.6
60°-70°	501.6	12.2
70°-80°	323.4	7.9
80°-90°	95.5	2.3
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°	1127.1	27.5
0°-40°	1828.4	44.5
0°-60°	3183.8	77.6
0°-90°	4104.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4104.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1471	1471	1471	1471	1471	
5°	1455	1459	1467	1469	1471	138
15°	1384	1392	1404	1415	1417	390
25°	1252	1264	1291	1308	1316	577
35°	1072	1086	1122	1157	1168	670
45°	862	881	927	975	988	665
55°	642	663	718	768	789	575
65°	421	446	513	563	586	418
75°	214	247	316	370	389	230
85°	52	71	92	92	92	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1470.7	1470.7	1470.7	1470.7	1470.7
2.5°	1461.1	1465.0	1472.6	1474.5	1474.5
5°	1455.4	1459.2	1466.9	1468.8	1470.7
7.5°	1445.8	1447.7	1457.3	1461.1	1463.0
10°	1430.5	1434.3	1443.9	1449.6	1451.5
12.5°	1409.4	1415.2	1426.7	1434.3	1436.2
15°	1384.5	1392.2	1403.7	1415.2	1417.1
17.5°	1357.7	1365.4	1380.7	1394.1	1397.9
20°	1325.2	1334.7	1352.0	1367.3	1373.0
22.5°	1292.6	1300.3	1321.3	1340.5	1346.2
25°	1252.4	1263.9	1290.7	1307.9	1315.6
27.5°	1210.3	1223.7	1250.5	1273.5	1281.1
30°	1166.2	1179.6	1208.3	1237.1	1246.6
32.5°	1120.3	1135.6	1170.0	1198.8	1208.3
35°	1072.4	1085.8	1122.2	1156.6	1168.1
37.5°	1022.6	1034.1	1076.2	1112.6	1124.1
40°	969.0	984.3	1028.3	1070.5	1082.0
42.5°	915.4	932.6	976.6	1022.6	1034.1
45°	861.7	880.9	926.8	974.7	988.1
47.5°	810.0	825.4	877.1	923.0	942.2
50°	754.5	769.8	819.6	871.3	890.5
52.5°	697.0	718.1	771.7	821.5	844.5
55°	641.5	662.6	718.1	767.9	789.0
57.5°	589.8	607.0	664.5	716.2	737.3
60°	534.3	549.6	610.9	666.4	685.6
62.5°	474.9	497.9	561.1	612.8	635.8
65°	421.3	446.2	513.2	563.0	586.0
67.5°	371.5	394.5	459.6	513.2	538.1
70°	314.1	344.7	411.7	465.3	488.3
72.5°	268.1	294.9	363.8	417.5	442.4
75°	214.5	247.0	316.0	369.6	388.7
77.5°	170.4	203.0	268.1	310.2	319.8
80°	124.5	157.0	218.3	239.4	245.1
82.5°	84.3	114.9	157.0	162.8	164.7
85°	51.7	70.9	91.9	91.9	91.9
87.5°	24.9	28.7	32.6	30.6	30.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)