

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: P388319

Luminaire Tested: **22CZ2-44VHE-UNV-L930-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: P388319
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: 22CZ2-44VHE-UNV-L930-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

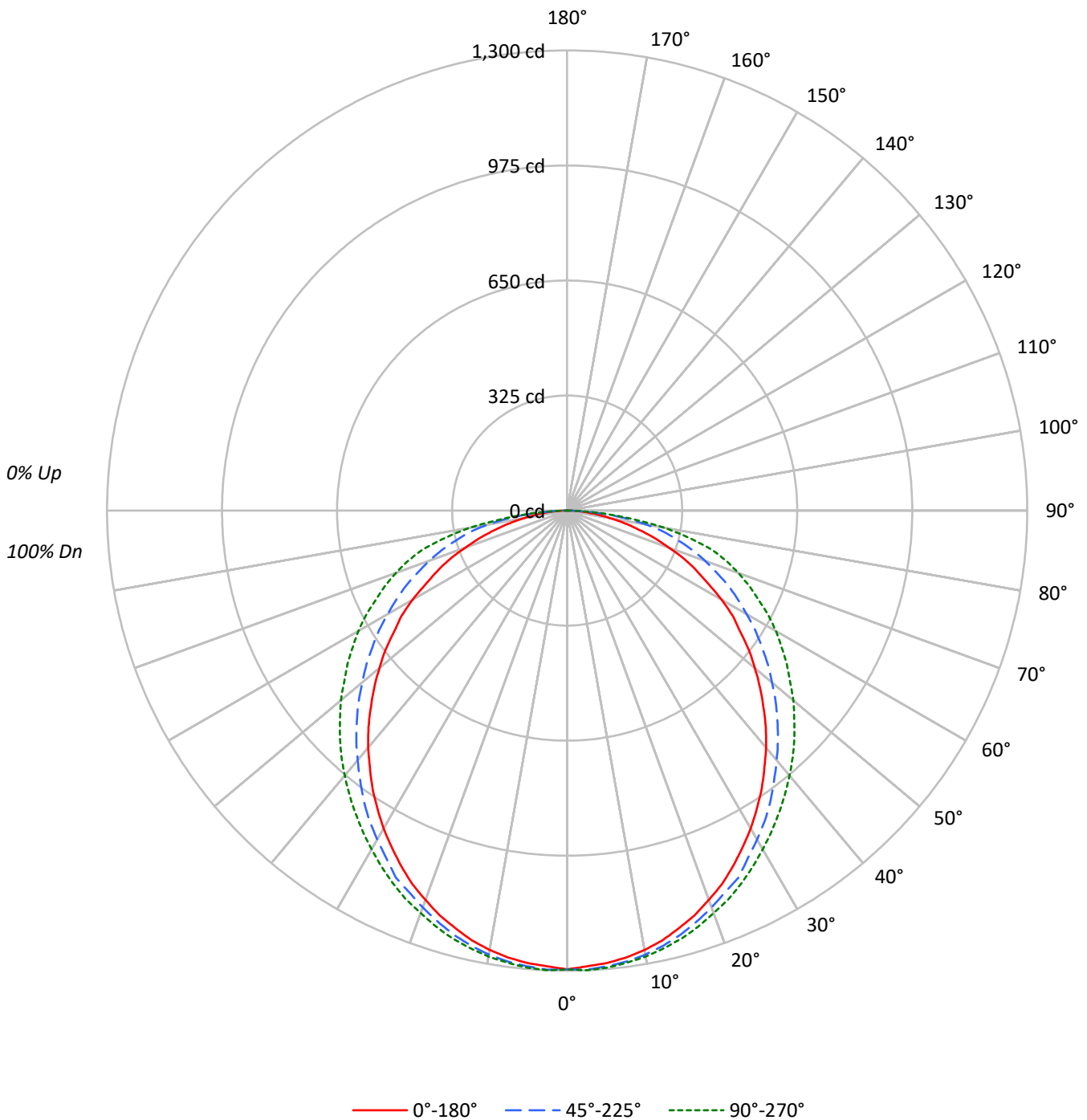
Lumens per Lamp: N/A
Luminaire Lumens: 3811.8 lumens
Efficiency: N/A
Efficacy: 116.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	3488	3488	3488
5°	3466	3491	3501
10°	3444	3480	3495
15°	3402	3454	3485
20°	3352	3416	3464
25°	3291	3397	3453
30°	3223	3334	3433
35°	3149	3290	3426
40°	3071	3235	3433
45°	2984	3198	3455
50°	2897	3165	3494
55°	2799	3150	3555
60°	2716	3150	3665
65°	2579	3201	3798
70°	2405	3261	4043
75°	2203	3374	4368
80°	1918	3518	4302
85°	1680	3128	3418



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.6	3.2
10°-20°	349.1	9.2
20°-30°	524.1	13.7
30°-40°	626.3	16.4
40°-50°	651.2	17.1
50°-60°	603.6	15.8
60°-70°	495.1	13.0
70°-80°	334.7	8.8
80°-90°	105.2	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°	995.8	26.1
0°-40°	1622.1	42.6
0°-60°	2876.9	75.5
0°-90°	3811.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3811.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1296	1296	1296	1296	1296	
5°	1283	1285	1292	1294	1296	122
15°	1221	1227	1240	1247	1251	344
25°	1108	1118	1144	1157	1163	510
35°	958	972	1002	1032	1043	599
45°	784	799	840	889	908	605
55°	596	615	672	732	758	536
65°	405	428	503	568	596	400
75°	212	248	324	390	420	225
85°	54	75	101	112	111	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1296.1	1296.1	1296.1	1296.1	1296.1
2.5°	1288.6	1292.3	1298.0	1299.8	1299.8
5°	1283.0	1284.8	1292.3	1294.2	1296.1
7.5°	1273.6	1277.3	1284.8	1286.7	1288.6
10°	1260.4	1264.2	1273.6	1277.3	1279.2
12.5°	1243.6	1247.3	1258.6	1264.2	1266.1
15°	1221.1	1226.7	1239.8	1247.3	1251.1
17.5°	1198.5	1204.2	1217.3	1228.6	1232.3
20°	1170.4	1183.5	1192.9	1207.9	1209.8
22.5°	1142.3	1149.8	1166.7	1181.7	1189.2
25°	1108.5	1117.9	1144.2	1157.3	1162.9
27.5°	1072.9	1086.0	1106.6	1127.3	1134.8
30°	1037.2	1046.6	1072.9	1097.3	1104.8
32.5°	997.9	1011.0	1039.1	1063.5	1074.8
35°	958.5	971.6	1001.6	1031.6	1042.9
37.5°	915.3	930.3	960.3	996.0	1011.0
40°	874.1	885.3	920.9	964.1	977.2
42.5°	830.9	844.0	881.6	928.5	943.5
45°	784.0	799.0	840.3	889.1	907.8
47.5°	739.0	754.0	799.0	847.8	870.3
50°	692.1	710.9	755.9	812.2	834.7
52.5°	647.1	664.0	714.6	772.8	793.4
55°	596.5	615.2	671.5	731.5	757.8
57.5°	555.2	568.3	630.2	692.1	718.4
60°	504.6	521.4	585.2	650.9	680.9
62.5°	450.2	478.3	543.9	611.5	641.5
65°	405.1	427.7	502.7	568.3	596.5
67.5°	358.3	382.6	455.8	525.2	557.1
70°	305.7	337.6	414.5	483.9	513.9
72.5°	258.8	292.6	371.4	438.9	470.8
75°	211.9	247.6	324.5	390.1	420.1
77.5°	166.9	206.3	281.3	332.0	350.7
80°	123.8	161.3	227.0	262.6	277.6
82.5°	86.3	118.2	166.9	185.7	189.4
85°	54.4	75.0	101.3	112.5	110.7
87.5°	24.4	30.0	37.5	41.3	39.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)