

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: P388150

Luminaire Tested: **22CZ2-100VHE-UNV-L930-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: P388150
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: 22CZ2-100VHE-UNV-L930-CD1-SWPD1-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: 8236.4 lumens
Efficiency: N/A
Efficacy: 106.0 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

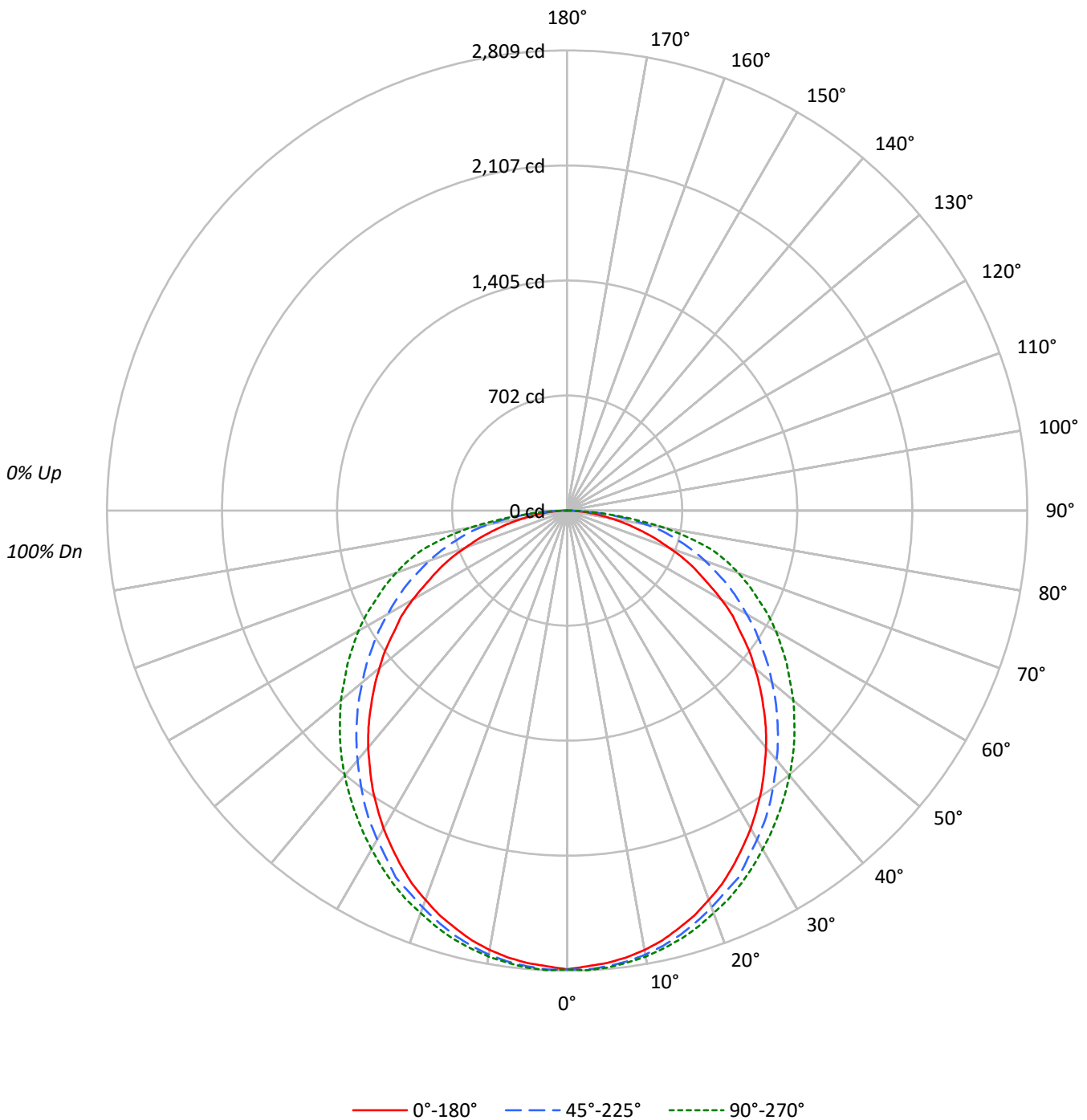
Input Watts (W): 77.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7536	7536	7536
5°	7488	7543	7565
10°	7442	7520	7553
15°	7350	7463	7531
20°	7242	7381	7486
25°	7112	7340	7461
30°	6964	7203	7417
35°	6803	7110	7403
40°	6634	6991	7417
45°	6447	6910	7465
50°	6261	6838	7550
55°	6047	6807	7682
60°	5867	6805	7918
65°	5574	6916	8206
70°	5198	7047	8737
75°	4762	7289	9439
80°	4145	7600	9295
85°	3628	6759	7382



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	264.9	3.2
10°-20°	754.4	9.2
20°-30°	1132.5	13.7
30°-40°	1353.2	16.4
40°-50°	1407.1	17.1
50°-60°	1304.2	15.8
60°-70°	1069.8	13.0
70°-80°	723.2	8.8
80°-90°	227.2	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°	2151.7	26.1
0°-40°	3504.9	42.6
0°-60°	6216.2	75.5
0°-90°	8236.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8236.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2800	2800	2800	2800	2800	
5°	2772	2776	2792	2796	2800	263
15°	2638	2651	2679	2695	2703	744
25°	2395	2416	2472	2501	2513	1103
35°	2071	2099	2164	2229	2253	1294
45°	1694	1726	1816	1921	1962	1308
55°	1289	1329	1451	1581	1637	1158
65°	875	924	1086	1228	1289	865
75°	458	535	701	843	908	486
85°	118	162	219	243	239	133
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2800.5	2800.5	2800.5	2800.5	2800.5
2.5°	2784.3	2792.4	2804.6	2808.6	2808.6
5°	2772.2	2776.2	2792.4	2796.5	2800.5
7.5°	2751.9	2760.0	2776.2	2780.3	2784.3
10°	2723.5	2731.6	2751.9	2760.0	2764.1
12.5°	2687.0	2695.2	2719.5	2731.6	2735.7
15°	2638.4	2650.6	2678.9	2695.2	2703.3
17.5°	2589.8	2601.9	2630.3	2654.6	2662.7
20°	2529.0	2557.4	2577.6	2610.0	2614.1
22.5°	2468.2	2484.4	2520.9	2553.3	2569.5
25°	2395.2	2415.5	2472.2	2500.6	2512.8
27.5°	2318.2	2346.6	2391.2	2435.8	2452.0
30°	2241.2	2261.5	2318.2	2370.9	2387.1
32.5°	2156.1	2184.5	2245.3	2298.0	2322.3
35°	2071.0	2099.4	2164.2	2229.1	2253.4
37.5°	1977.8	2010.2	2075.1	2152.1	2184.5
40°	1888.6	1913.0	1990.0	2083.2	2111.5
42.5°	1795.4	1823.8	1904.8	2006.2	2038.6
45°	1694.1	1726.5	1815.7	1921.1	1961.6
47.5°	1596.8	1629.3	1726.5	1831.9	1880.5
50°	1495.5	1536.0	1633.3	1754.9	1803.5
52.5°	1398.2	1434.7	1544.1	1669.8	1714.4
55°	1288.8	1329.3	1450.9	1580.6	1637.4
57.5°	1199.6	1228.0	1361.8	1495.5	1552.2
60°	1090.2	1126.7	1264.5	1406.3	1471.2
62.5°	972.7	1033.5	1175.3	1321.2	1386.1
65°	875.4	924.1	1086.2	1228.0	1288.8
67.5°	774.1	826.8	984.8	1134.8	1203.7
70°	660.6	729.5	895.7	1045.6	1110.5
72.5°	559.3	632.2	802.5	948.4	1017.3
75°	458.0	535.0	701.1	843.0	907.8
77.5°	360.7	445.8	607.9	717.4	757.9
80°	267.5	348.5	490.4	567.4	599.8
82.5°	186.4	255.3	360.7	401.2	409.3
85°	117.5	162.1	218.9	243.2	239.1
87.5°	52.7	64.8	81.1	89.2	85.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)