

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: P389495

Luminaire Tested: **22CZ2-95VHE-S-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: P389495
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: 22CZ2-95VHE-S-UNV-L930-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8331.2 lumens
Efficiency: N/A
Efficacy: 114.6 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

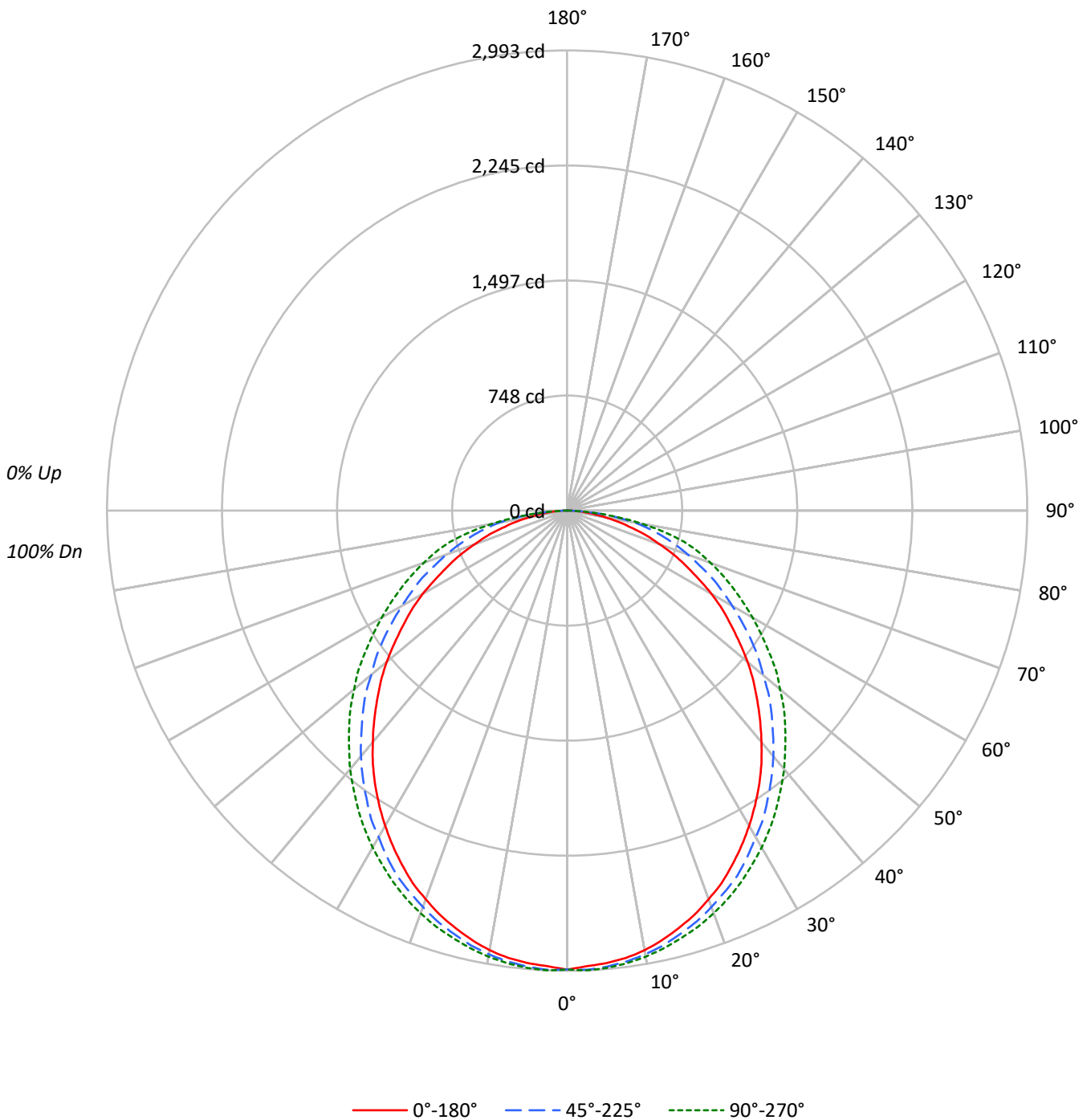
Input Watts (W): 72.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	8033	8033	8033
5°	7980	8043	8064
10°	7934	8009	8051
15°	7830	7938	8014
20°	7703	7859	7981
25°	7548	7779	7929
30°	7356	7622	7863
35°	7151	7483	7790
40°	6909	7333	7715
45°	6657	7160	7633
50°	6412	6965	7567
55°	6109	6839	7514
60°	5837	6674	7490
65°	5445	6634	7574
70°	5016	6575	7799
75°	4527	6669	8204
80°	3916	6867	7711
85°	3242	5761	5761



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	282.3	3.4
10°-20°	803.4	9.6
20°-30°	1202.1	14.4
30°-40°	1423.6	17.1
40°-50°	1450.8	17.4
50°-60°	1300.4	15.6
60°-70°	1018.1	12.2
70°-80°	656.5	7.9
80°-90°	193.9	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°	2287.9	27.5
0°-40°	3711.5	44.5
0°-60°	6462.7	77.6
0°-90°	8331.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8331.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2985	2985	2985	2985	2985	
5°	2954	2962	2978	2981	2985	280
15°	2810	2826	2849	2873	2876	792
25°	2542	2566	2620	2655	2670	1170
35°	2177	2204	2278	2348	2371	1360
45°	1749	1788	1881	1979	2006	1351
55°	1302	1345	1458	1559	1602	1168
65°	855	906	1042	1143	1190	849
75°	435	501	641	750	789	467
85°	105	144	187	187	187	123
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2985.3	2985.3	2985.3	2985.3	2985.3
2.5°	2965.9	2973.7	2989.2	2993.1	2993.1
5°	2954.2	2962.0	2977.6	2981.4	2985.3
7.5°	2934.8	2938.7	2958.1	2965.9	2969.8
10°	2903.7	2911.5	2930.9	2942.6	2946.5
12.5°	2860.9	2872.6	2895.9	2911.5	2915.4
15°	2810.4	2826.0	2849.3	2872.6	2876.5
17.5°	2756.0	2771.5	2802.6	2829.8	2837.6
20°	2689.9	2709.3	2744.3	2775.4	2787.1
22.5°	2623.8	2639.4	2682.1	2721.0	2732.7
25°	2542.2	2565.5	2619.9	2654.9	2670.5
27.5°	2456.7	2483.9	2538.3	2585.0	2600.5
30°	2367.3	2394.5	2452.8	2511.1	2530.5
32.5°	2274.0	2305.1	2375.0	2433.4	2452.8
35°	2176.8	2204.0	2277.9	2347.8	2371.2
37.5°	2075.7	2099.1	2184.6	2258.4	2281.8
40°	1966.9	1998.0	2087.4	2172.9	2196.2
42.5°	1858.1	1893.0	1982.4	2075.7	2099.1
45°	1749.2	1788.1	1881.4	1978.6	2005.8
47.5°	1644.3	1675.4	1780.3	1873.6	1912.5
50°	1531.5	1562.6	1663.7	1768.7	1807.5
52.5°	1414.9	1457.7	1566.5	1667.6	1714.2
55°	1302.2	1345.0	1457.7	1558.7	1601.5
57.5°	1197.2	1232.2	1348.8	1453.8	1496.6
60°	1084.5	1115.6	1240.0	1352.7	1391.6
62.5°	964.0	1010.7	1138.9	1243.9	1290.5
65°	855.2	905.7	1041.8	1142.8	1189.5
67.5°	754.1	800.8	932.9	1041.8	1092.3
70°	637.5	699.7	835.7	944.6	991.2
72.5°	544.2	598.6	738.6	847.4	897.9
75°	435.4	501.4	641.4	750.2	789.1
77.5°	346.0	412.0	544.2	629.7	649.2
80°	252.7	318.7	443.1	485.9	497.6
82.5°	171.0	233.2	318.7	330.4	334.3
85°	105.0	143.8	186.6	186.6	186.6
87.5°	50.5	58.3	66.1	62.2	62.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)