

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: P389088

Luminaire Tested: **22CZ2-100VHE-S-UNV-L935-CD1-SDWPD1-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: P389088
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: 22CZ2-100VHE-S-UNV-L935-CD1-SDWPD1-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: 8761.3 lumens
Efficiency: N/A
Efficacy: 112.8 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

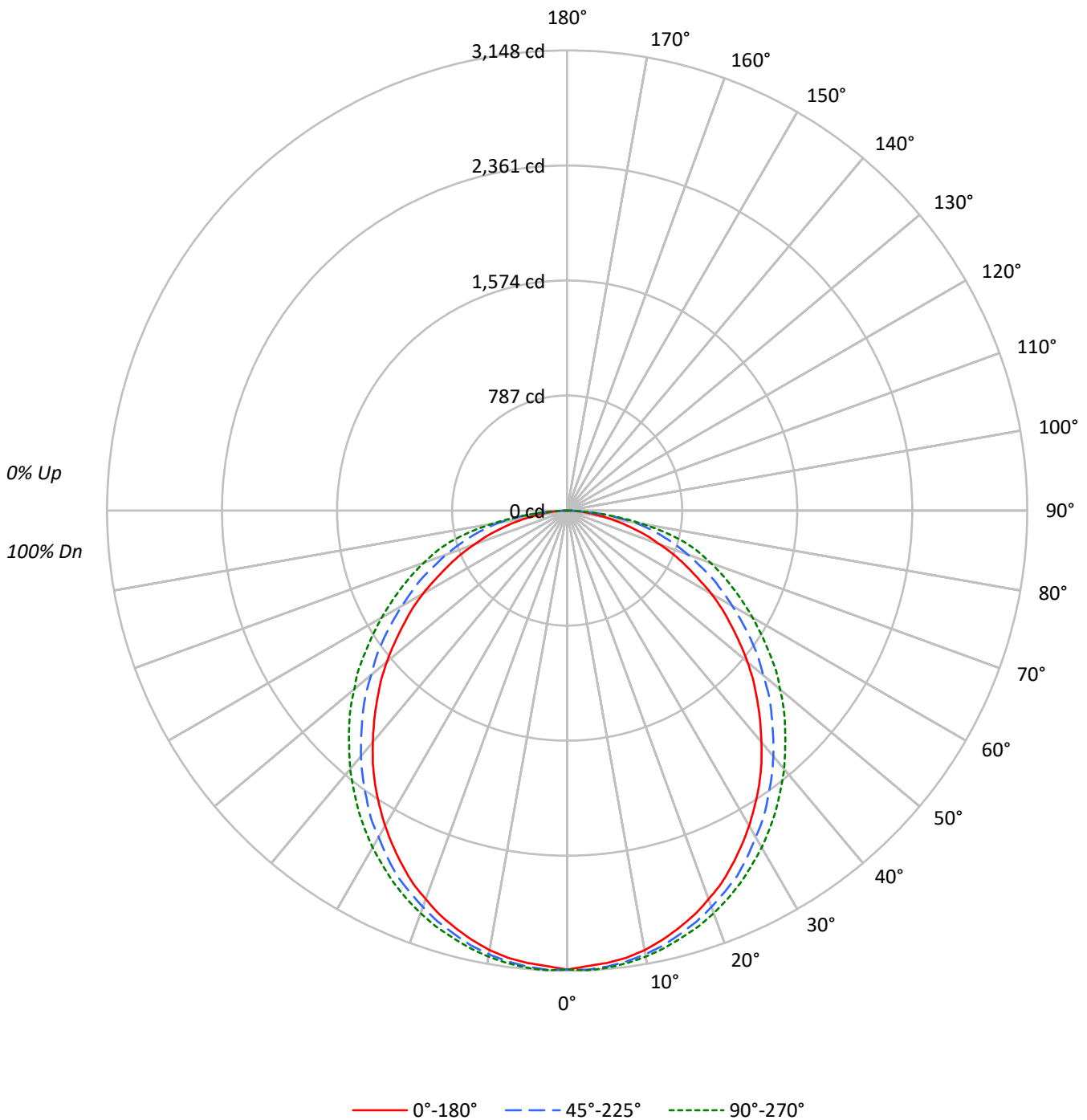
Input Watts (W): 77.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	8448	8448	8448
5°	8392	8458	8480
10°	8344	8422	8467
15°	8234	8348	8427
20°	8101	8265	8393
25°	7938	8181	8338
30°	7736	8015	8269
35°	7520	7869	8192
40°	7266	7711	8113
45°	7000	7529	8027
50°	6743	7325	7958
55°	6425	7192	7902
60°	6138	7018	7876
65°	5726	6975	7965
70°	5275	6915	8201
75°	4760	7013	8628
80°	4117	7221	8108
85°	3409	6058	6058



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	296.9	3.4
10°-20°	844.9	9.6
20°-30°	1264.2	14.4
30°-40°	1497.1	17.1
40°-50°	1525.7	17.4
50°-60°	1367.5	15.6
60°-70°	1070.6	12.2
70°-80°	690.4	7.9
80°-90°	203.9	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°	2406.0	27.5
0°-40°	3903.1	44.5
0°-60°	6796.3	77.6
0°-90°	8761.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8761.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3139	3139	3139	3139	3139	
5°	3107	3115	3131	3135	3139	295
15°	2956	2972	2996	3021	3025	833
25°	2673	2698	2755	2792	2808	1231
35°	2289	2318	2396	2469	2494	1431
45°	1840	1880	1978	2081	2109	1421
55°	1369	1414	1533	1639	1684	1228
65°	899	952	1096	1202	1251	893
75°	458	527	674	789	830	491
85°	110	151	196	196	196	130
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3139.4	3139.4	3139.4	3139.4	3139.4
2.5°	3119.0	3127.2	3143.5	3147.6	3147.6
5°	3106.7	3114.9	3131.3	3135.4	3139.4
7.5°	3086.3	3090.4	3110.8	3119.0	3123.1
10°	3053.6	3061.8	3082.2	3094.5	3098.6
12.5°	3008.6	3020.9	3045.4	3061.8	3065.9
15°	2955.5	2971.8	2996.4	3020.9	3025.0
17.5°	2898.3	2914.6	2947.3	2975.9	2984.1
20°	2828.8	2849.2	2886.0	2918.7	2931.0
22.5°	2759.3	2775.6	2820.6	2861.5	2873.7
25°	2673.4	2698.0	2755.2	2792.0	2808.3
27.5°	2583.5	2612.1	2669.3	2718.4	2734.8
30°	2489.5	2518.1	2579.4	2640.7	2661.2
32.5°	2391.4	2424.1	2497.7	2559.0	2579.4
35°	2289.2	2317.8	2395.5	2469.0	2493.6
37.5°	2182.9	2207.4	2297.4	2375.0	2399.6
40°	2068.4	2101.1	2195.2	2285.1	2309.6
42.5°	1954.0	1990.8	2084.8	2182.9	2207.4
45°	1839.5	1880.4	1978.5	2080.7	2109.3
47.5°	1729.1	1761.9	1872.2	1970.3	2011.2
50°	1610.6	1643.3	1749.6	1860.0	1900.8
52.5°	1488.0	1532.9	1647.4	1753.7	1802.7
55°	1369.4	1414.4	1532.9	1639.2	1684.2
57.5°	1259.0	1295.8	1418.5	1528.8	1573.8
60°	1140.5	1173.2	1304.0	1422.6	1463.4
62.5°	1013.8	1062.8	1197.7	1308.1	1357.2
65°	899.3	952.5	1095.5	1201.8	1250.9
67.5°	793.0	842.1	981.1	1095.5	1148.7
70°	670.4	735.8	878.9	993.3	1042.4
72.5°	572.3	629.5	776.7	891.1	944.3
75°	457.8	527.3	674.5	788.9	829.8
77.5°	363.8	433.3	572.3	662.2	682.7
80°	265.7	335.2	466.0	511.0	523.2
82.5°	179.9	245.3	335.2	347.5	351.6
85°	110.4	151.2	196.2	196.2	196.2
87.5°	53.1	61.3	69.5	65.4	65.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)