

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: P389424

Luminaire Tested: **22CZ2-80VHE-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: P389424
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: 22CZ2-80VHE-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: 7013.9 lumens
Efficiency: N/A
Efficacy: 118.7 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

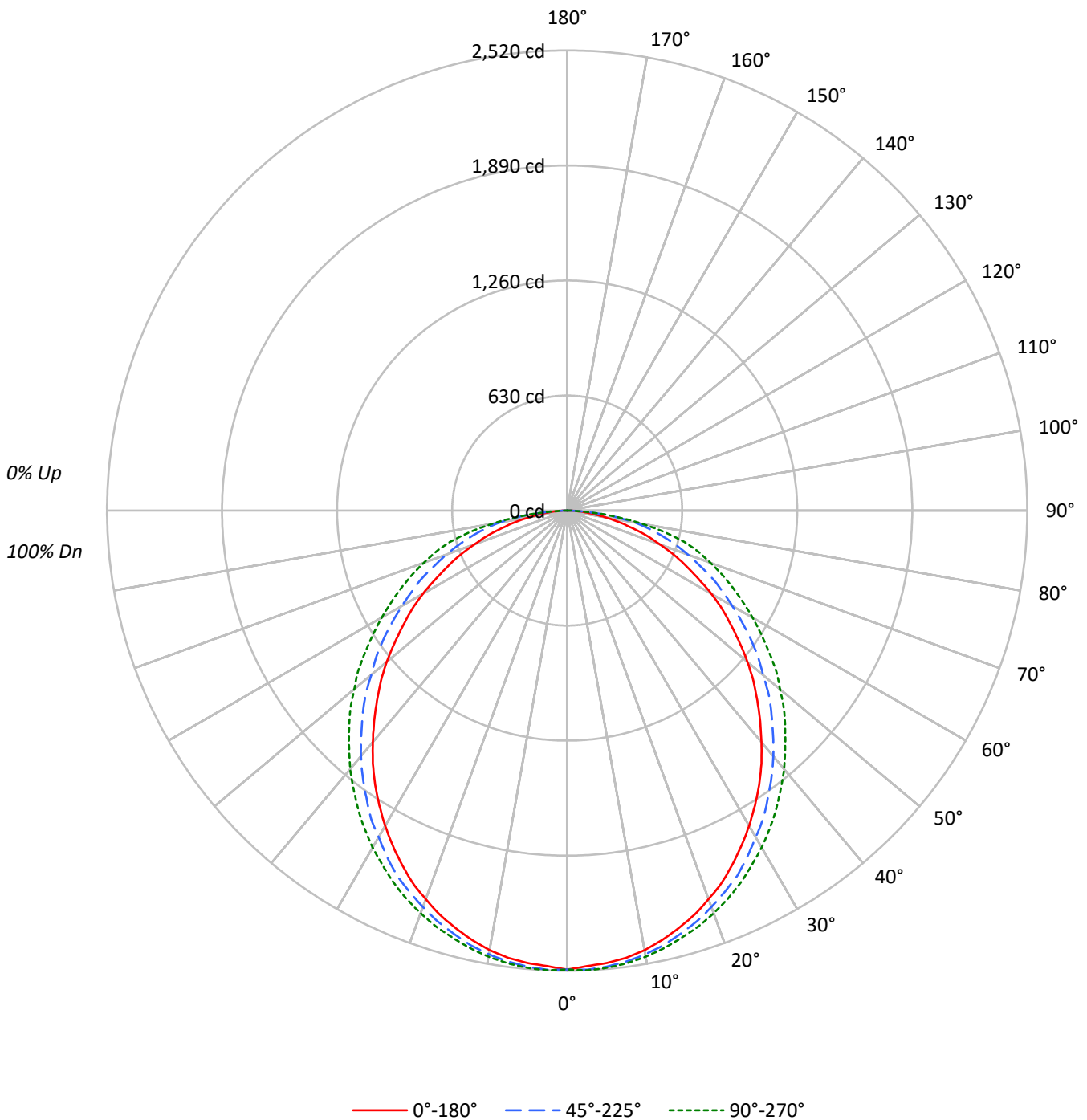
Input Watts (W): 59.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6763	6763	6763
5°	6718	6772	6789
10°	6680	6742	6778
15°	6591	6683	6747
20°	6485	6616	6719
25°	6355	6549	6675
30°	6193	6417	6620
35°	6020	6300	6558
40°	5817	6173	6495
45°	5604	6028	6426
50°	5398	5863	6370
55°	5143	5758	6326
60°	4914	5618	6306
65°	4585	5584	6376
70°	4223	5536	6566
75°	3811	5614	6907
80°	3296	5782	6492
85°	2729	4851	4851



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	237.7	3.4
10°-20°	676.4	9.6
20°-30°	1012.1	14.4
30°-40°	1198.5	17.1
40°-50°	1221.4	17.4
50°-60°	1094.8	15.6
60°-70°	857.1	12.2
70°-80°	552.7	7.9
80°-90°	163.3	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°	1926.1	27.5
0°-40°	3124.6	44.5
0°-60°	5440.8	77.6
0°-90°	7013.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7013.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2513	2513	2513	2513	2513	
5°	2487	2494	2507	2510	2513	236
15°	2366	2379	2399	2418	2422	667
25°	2140	2160	2206	2235	2248	985
35°	1833	1856	1918	1977	1996	1145
45°	1473	1505	1584	1666	1689	1137
55°	1096	1132	1227	1312	1348	983
65°	720	762	877	962	1001	715
75°	366	422	540	632	664	393
85°	88	121	157	157	157	104
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2513.3	2513.3	2513.3	2513.3	2513.3
2.5°	2496.9	2503.5	2516.6	2519.8	2519.8
5°	2487.1	2493.7	2506.8	2510.0	2513.3
7.5°	2470.8	2474.0	2490.4	2496.9	2500.2
10°	2444.6	2451.1	2467.5	2477.3	2480.6
12.5°	2408.6	2418.4	2438.0	2451.1	2454.4
15°	2366.0	2379.1	2398.8	2418.4	2421.7
17.5°	2320.2	2333.3	2359.5	2382.4	2388.9
20°	2264.6	2280.9	2310.4	2336.6	2346.4
22.5°	2209.0	2222.0	2258.0	2290.8	2300.6
25°	2140.2	2159.9	2205.7	2235.1	2248.2
27.5°	2068.2	2091.1	2137.0	2176.2	2189.3
30°	1993.0	2015.9	2065.0	2114.1	2130.4
32.5°	1914.4	1940.6	1999.5	2048.6	2065.0
35°	1832.6	1855.5	1917.7	1976.6	1996.2
37.5°	1747.5	1767.2	1839.2	1901.3	1921.0
40°	1655.9	1682.1	1757.3	1829.3	1849.0
42.5°	1564.3	1593.7	1669.0	1747.5	1767.2
45°	1472.6	1505.4	1583.9	1665.7	1688.6
47.5°	1384.3	1410.5	1498.8	1577.4	1610.1
50°	1289.4	1315.6	1400.6	1489.0	1521.7
52.5°	1191.2	1227.2	1318.8	1403.9	1443.2
55°	1096.3	1132.3	1227.2	1312.3	1348.3
57.5°	1007.9	1037.4	1135.6	1223.9	1259.9
60°	913.0	939.2	1043.9	1138.8	1171.6
62.5°	811.6	850.9	958.8	1047.2	1086.5
65°	720.0	762.5	877.0	962.1	1001.4
67.5°	634.9	674.1	785.4	877.0	919.6
70°	536.7	589.1	703.6	795.2	834.5
72.5°	458.2	504.0	621.8	713.4	756.0
75°	366.5	422.2	540.0	631.6	664.3
77.5°	291.3	346.9	458.2	530.1	546.5
80°	212.7	268.3	373.1	409.1	418.9
82.5°	144.0	196.4	268.3	278.2	281.4
85°	88.4	121.1	157.1	157.1	157.1
87.5°	42.5	49.1	55.6	52.4	52.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)