

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: P388485

Luminaire Tested: **22CZ2-80VHE-UNV-L930-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: P388485
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: 22CZ2-80VHE-UNV-L930-CD1-SDWPD1-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: 6514.1 lumens
Efficiency: N/A
Efficacy: 110.2 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

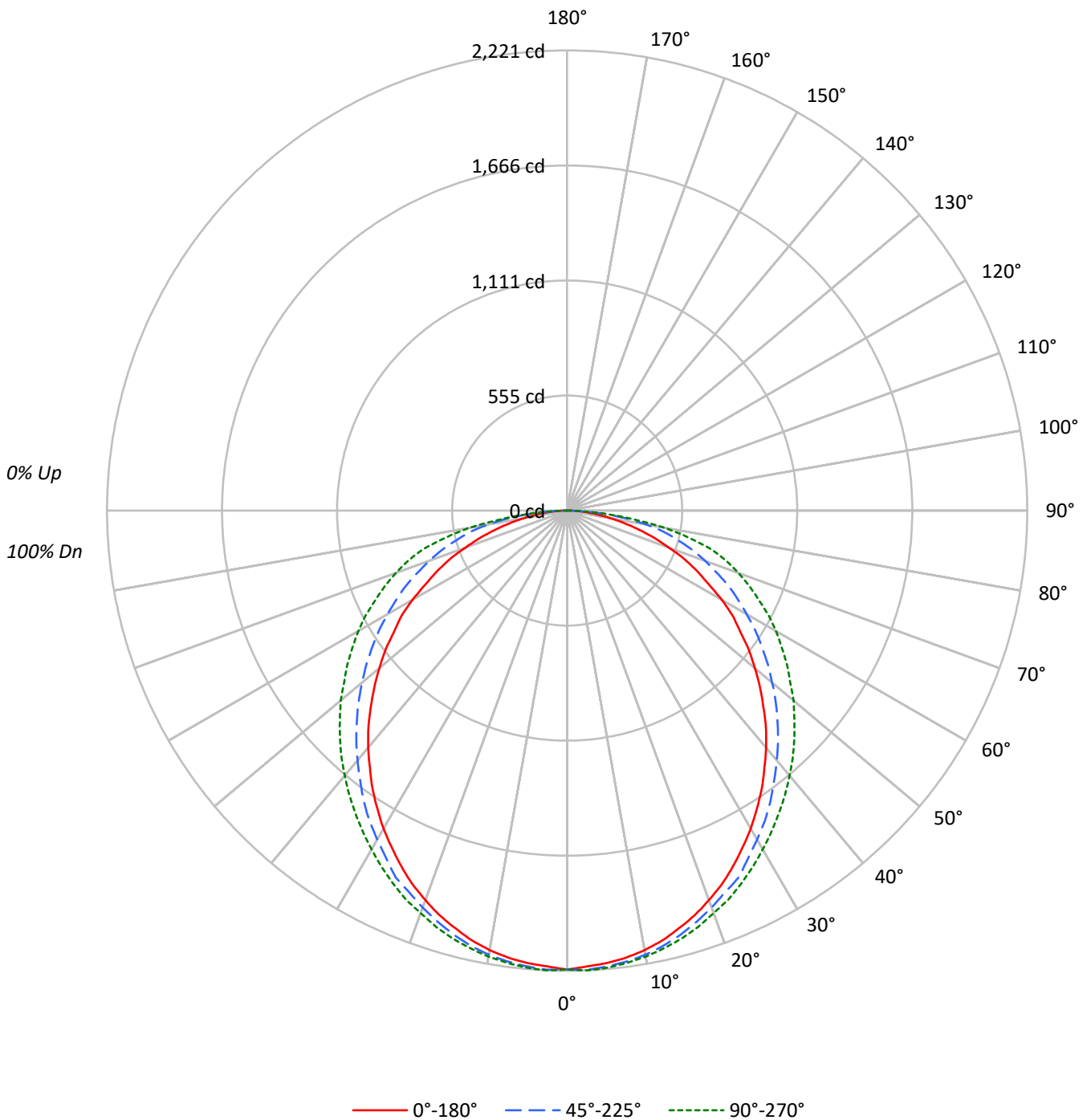
Input Watts (W): 59.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	5960	5960	5960
5°	5923	5966	5983
10°	5886	5947	5973
15°	5813	5903	5956
20°	5728	5838	5921
25°	5625	5806	5901
30°	5508	5697	5867
35°	5381	5623	5855
40°	5247	5528	5866
45°	5099	5465	5904
50°	4952	5408	5972
55°	4782	5384	6076
60°	4640	5382	6262
65°	4409	5470	6490
70°	4111	5574	6910
75°	3766	5765	7465
80°	3279	6011	7352
85°	2871	5345	5839



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.5	3.2
10°-20°	596.6	9.2
20°-30°	895.7	13.7
30°-40°	1070.2	16.4
40°-50°	1112.9	17.1
50°-60°	1031.5	15.8
60°-70°	846.1	13.0
70°-80°	571.9	8.8
80°-90°	179.7	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°	1701.8	26.1
0°-40°	2772.0	42.6
0°-60°	4916.4	75.5
0°-90°	6514.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6514.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2215	2215	2215	2215	2215	
5°	2192	2196	2208	2212	2215	208
15°	2087	2096	2119	2132	2138	589
25°	1894	1910	1955	1978	1987	872
35°	1638	1660	1712	1763	1782	1024
45°	1340	1366	1436	1519	1551	1035
55°	1019	1051	1148	1250	1295	916
65°	692	731	859	971	1019	684
75°	362	423	554	667	718	384
85°	93	128	173	192	189	106
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2214.9	2214.9	2214.9	2214.9	2214.9
2.5°	2202.1	2208.5	2218.1	2221.3	2221.3
5°	2192.5	2195.7	2208.5	2211.7	2214.9
7.5°	2176.4	2182.9	2195.7	2198.9	2202.1
10°	2154.0	2160.4	2176.4	2182.9	2186.1
12.5°	2125.2	2131.6	2150.8	2160.4	2163.6
15°	2086.7	2096.3	2118.8	2131.6	2138.0
17.5°	2048.2	2057.9	2080.3	2099.5	2105.9
20°	2000.2	2022.6	2038.6	2064.3	2067.5
22.5°	1952.1	1964.9	1993.7	2019.4	2032.2
25°	1894.4	1910.4	1955.3	1977.7	1987.3
27.5°	1833.5	1855.9	1891.2	1926.4	1939.3
30°	1772.6	1788.6	1833.5	1875.1	1888.0
32.5°	1705.3	1727.7	1775.8	1817.4	1836.7
35°	1637.9	1660.4	1711.7	1763.0	1782.2
37.5°	1564.2	1589.9	1641.2	1702.1	1727.7
40°	1493.7	1512.9	1573.8	1647.6	1670.0
42.5°	1420.0	1442.4	1506.5	1586.7	1612.3
45°	1339.8	1365.5	1436.0	1519.3	1551.4
47.5°	1262.9	1288.6	1365.5	1448.8	1487.3
50°	1182.8	1214.8	1291.8	1387.9	1426.4
52.5°	1105.9	1134.7	1221.2	1320.6	1355.9
55°	1019.3	1051.4	1147.5	1250.1	1295.0
57.5°	948.8	971.2	1077.0	1182.8	1227.7
60°	862.2	891.1	1000.1	1112.3	1163.6
62.5°	769.3	817.4	929.6	1045.0	1096.2
65°	692.4	730.8	859.0	971.2	1019.3
67.5°	612.2	653.9	778.9	897.5	952.0
70°	522.5	577.0	708.4	827.0	878.3
72.5°	442.3	500.0	634.7	750.1	804.5
75°	362.2	423.1	554.5	666.7	718.0
77.5°	285.3	352.6	480.8	567.4	599.4
80°	211.6	275.7	387.9	448.8	474.4
82.5°	147.4	201.9	285.3	317.3	323.7
85°	93.0	128.2	173.1	192.3	189.1
87.5°	41.7	51.3	64.1	70.5	67.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)