

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: P388488

Luminaire Tested: **22CZ2-80VHE-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: P388488
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-L935-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6675.3 lumens
Efficiency: N/A
Efficacy: 112.9 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

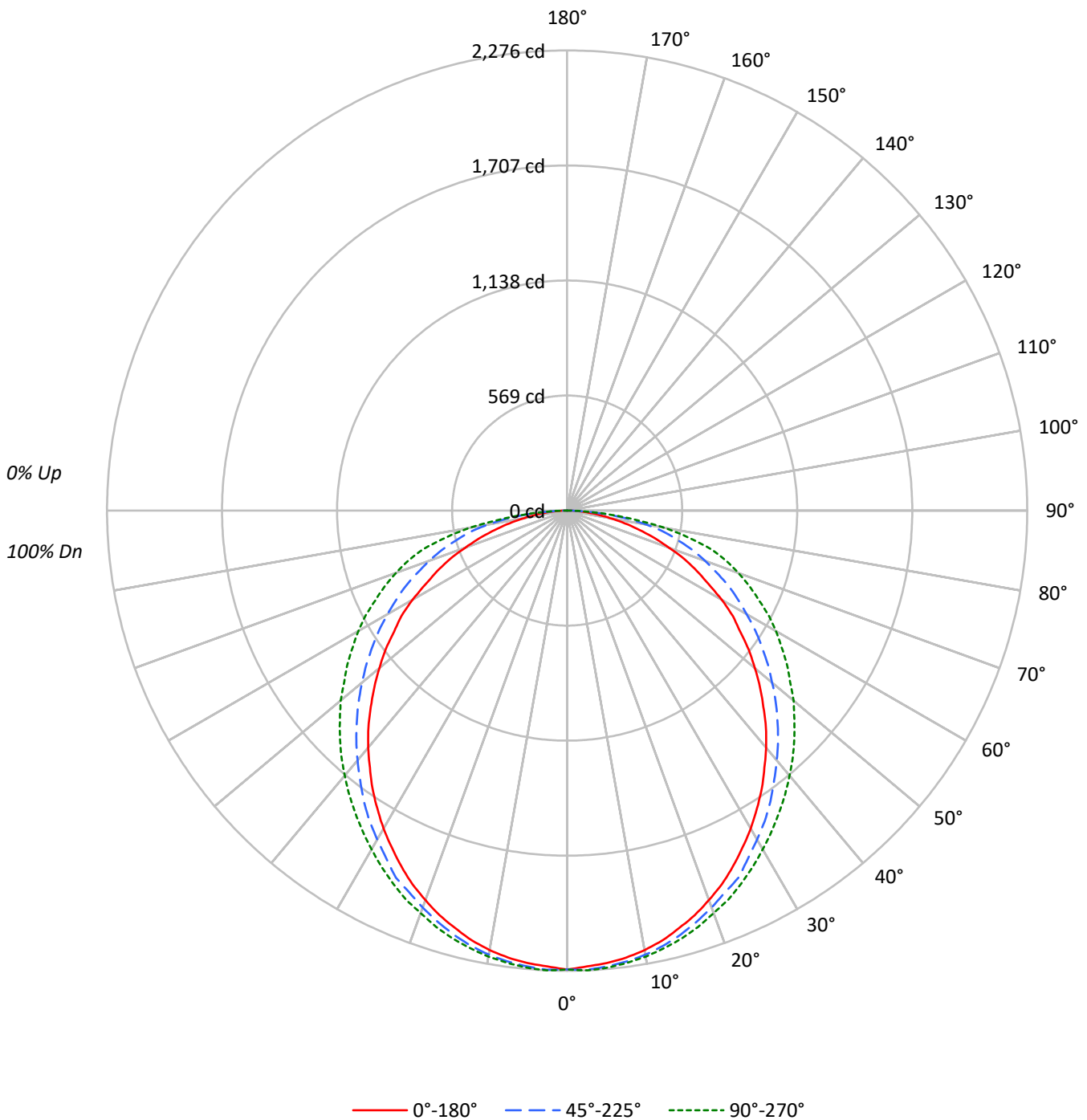
Input Watts (W): 59.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6108	6108	6108
5°	6069	6113	6131
10°	6031	6094	6121
15°	5957	6049	6104
20°	5870	5983	6067
25°	5764	5949	6047
30°	5644	5838	6012
35°	5514	5762	6000
40°	5377	5665	6011
45°	5225	5600	6050
50°	5074	5542	6119
55°	4900	5517	6226
60°	4755	5515	6417
65°	4518	5605	6651
70°	4212	5711	7081
75°	3859	5909	7650
80°	3360	6158	7533
85°	2942	5477	5984



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.7	3.2
10°-20°	611.4	9.2
20°-30°	917.8	13.7
30°-40°	1096.7	16.4
40°-50°	1140.4	17.1
50°-60°	1057.0	15.8
60°-70°	867.0	13.0
70°-80°	586.1	8.8
80°-90°	184.2	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°	1743.9	26.1
0°-40°	2840.6	42.6
0°-60°	5038.0	75.5
0°-90°	6675.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6675.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2270	2270	2270	2270	2270	
5°	2247	2250	2263	2266	2270	213
15°	2138	2148	2171	2184	2191	603
25°	1941	1958	2004	2027	2036	894
35°	1678	1702	1754	1807	1826	1049
45°	1373	1399	1472	1557	1590	1060
55°	1044	1077	1176	1281	1327	939
65°	710	749	880	995	1044	701
75°	371	434	568	683	736	394
85°	95	131	177	197	194	108
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2269.7	2269.7	2269.7	2269.7	2269.7
2.5°	2256.6	2263.2	2273.0	2276.3	2276.3
5°	2246.7	2250.0	2263.2	2266.4	2269.7
7.5°	2230.3	2236.9	2250.0	2253.3	2256.6
10°	2207.3	2213.9	2230.3	2236.9	2240.2
12.5°	2177.8	2184.3	2204.0	2213.9	2217.2
15°	2138.3	2148.2	2171.2	2184.3	2190.9
17.5°	2098.9	2108.8	2131.8	2151.5	2158.0
20°	2049.7	2072.6	2089.1	2115.3	2118.6
22.5°	2000.4	2013.5	2043.1	2069.4	2082.5
25°	1941.3	1957.7	2003.7	2026.7	2036.5
27.5°	1878.8	1901.8	1938.0	1974.1	1987.2
30°	1816.4	1832.9	1878.8	1921.5	1934.7
32.5°	1747.5	1770.5	1819.7	1862.4	1882.1
35°	1678.5	1701.5	1754.0	1806.6	1826.3
37.5°	1602.9	1629.2	1681.8	1744.2	1770.5
40°	1530.7	1550.4	1612.8	1688.3	1711.3
42.5°	1455.1	1478.1	1543.8	1625.9	1652.2
45°	1373.0	1399.3	1471.5	1556.9	1589.8
47.5°	1294.2	1320.4	1399.3	1484.7	1524.1
50°	1212.1	1244.9	1323.7	1422.3	1461.7
52.5°	1133.2	1162.8	1251.5	1353.3	1389.4
55°	1044.5	1077.4	1175.9	1281.0	1327.0
57.5°	972.3	995.3	1103.7	1212.1	1258.0
60°	883.6	913.1	1024.8	1139.8	1192.3
62.5°	788.3	837.6	952.6	1070.8	1123.4
65°	709.5	748.9	880.3	995.3	1044.5
67.5°	627.4	670.1	798.2	919.7	975.6
70°	535.4	591.2	725.9	847.5	900.0
72.5°	453.3	512.4	650.4	768.6	824.5
75°	371.2	433.6	568.3	683.2	735.8
77.5°	292.3	361.3	492.7	581.4	614.2
80°	216.8	282.5	397.4	459.9	486.1
82.5°	151.1	206.9	292.3	325.2	331.8
85°	95.3	131.4	177.4	197.1	193.8
87.5°	42.7	52.6	65.7	72.3	69.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)