

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: P388490

Luminaire Tested: **22CZ2-80VHE-UNV-L935-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: P388490
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-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

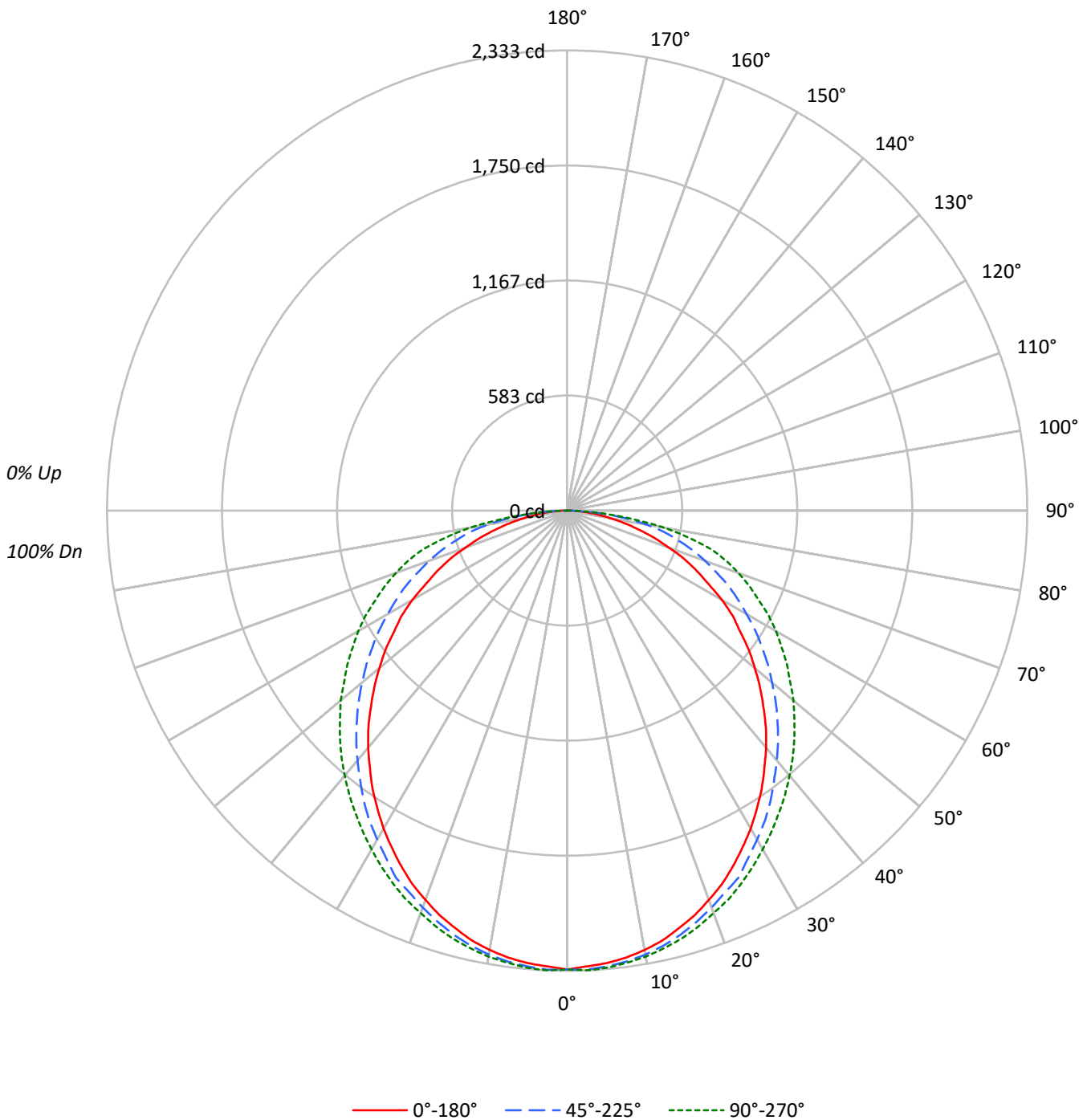
Lumens per Lamp: N/A
Luminaire Lumens: 6841.6 lumens
Efficiency: N/A
Efficacy: 115.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	6260	6260	6260
5°	6220	6266	6284
10°	6182	6246	6274
15°	6106	6199	6256
20°	6016	6131	6218
25°	5907	6097	6197
30°	5785	5984	6161
35°	5651	5906	6149
40°	5511	5807	6161
45°	5355	5740	6201
50°	5200	5680	6272
55°	5023	5654	6381
60°	4874	5653	6577
65°	4630	5745	6817
70°	4317	5854	7257
75°	3955	6055	7840
80°	3443	6312	7720
85°	3013	5613	6132



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	220.0	3.2
10°-20°	626.6	9.2
20°-30°	940.7	13.7
30°-40°	1124.1	16.4
40°-50°	1168.8	17.1
50°-60°	1083.3	15.8
60°-70°	888.6	13.0
70°-80°	600.7	8.8
80°-90°	188.8	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°	1787.3	26.1
0°-40°	2911.4	42.6
0°-60°	5163.6	75.5
0°-90°	6841.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6841.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2326	2326	2326	2326	2326	
5°	2303	2306	2320	2323	2326	219
15°	2192	2202	2225	2239	2246	618
25°	1990	2006	2054	2077	2087	916
35°	1720	1744	1798	1852	1872	1075
45°	1407	1434	1508	1596	1629	1087
55°	1071	1104	1205	1313	1360	962
65°	727	768	902	1020	1071	719
75°	380	444	582	700	754	403
85°	98	135	182	202	199	111
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2326.3	2326.3	2326.3	2326.3	2326.3
2.5°	2312.8	2319.5	2329.6	2333.0	2333.0
5°	2302.7	2306.1	2319.5	2322.9	2326.3
7.5°	2285.9	2292.6	2306.1	2309.4	2312.8
10°	2262.3	2269.0	2285.9	2292.6	2296.0
12.5°	2232.0	2238.7	2258.9	2269.0	2272.4
15°	2191.6	2201.7	2225.3	2238.7	2245.5
17.5°	2151.2	2161.3	2184.9	2205.1	2211.8
20°	2100.7	2124.3	2141.1	2168.0	2171.4
22.5°	2050.2	2063.7	2094.0	2120.9	2134.4
25°	1989.6	2006.5	2053.6	2077.1	2087.2
27.5°	1925.7	1949.2	1986.3	2023.3	2036.7
30°	1861.7	1878.5	1925.7	1969.4	1982.9
32.5°	1791.0	1814.6	1865.1	1908.8	1929.0
35°	1720.3	1743.9	1797.7	1851.6	1871.8
37.5°	1642.9	1669.8	1723.7	1787.6	1814.6
40°	1568.8	1589.0	1653.0	1730.4	1754.0
42.5°	1491.4	1514.9	1582.3	1666.4	1693.4
45°	1407.2	1434.1	1508.2	1595.7	1629.4
47.5°	1326.4	1353.3	1434.1	1521.7	1562.1
50°	1242.2	1275.9	1356.7	1457.7	1498.1
52.5°	1161.5	1191.8	1282.6	1387.0	1424.0
55°	1070.6	1104.2	1205.2	1312.9	1360.1
57.5°	996.5	1020.1	1131.2	1242.2	1289.4
60°	905.6	935.9	1050.4	1168.2	1222.0
62.5°	808.0	858.5	976.3	1097.5	1151.4
65°	727.2	767.6	902.2	1020.1	1070.6
67.5°	643.0	686.8	818.1	942.6	999.9
70°	548.7	606.0	744.0	868.6	922.4
72.5°	464.6	525.2	666.6	787.8	845.0
75°	380.4	444.4	582.4	700.2	754.1
77.5°	299.6	370.3	505.0	595.9	629.5
80°	222.2	289.5	407.3	471.3	498.2
82.5°	154.9	212.1	299.6	333.3	340.0
85°	97.6	134.7	181.8	202.0	198.6
87.5°	43.8	53.9	67.3	74.1	70.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)