

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: P389404

Luminaire Tested: **22CZ2-75VHE-S-UNV-L940-CD1-SWPD1-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: P389404
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: 22CZ2-75VHE-S-UNV-L940-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6698.8 lumens
Efficiency: N/A
Efficacy: 122.5 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

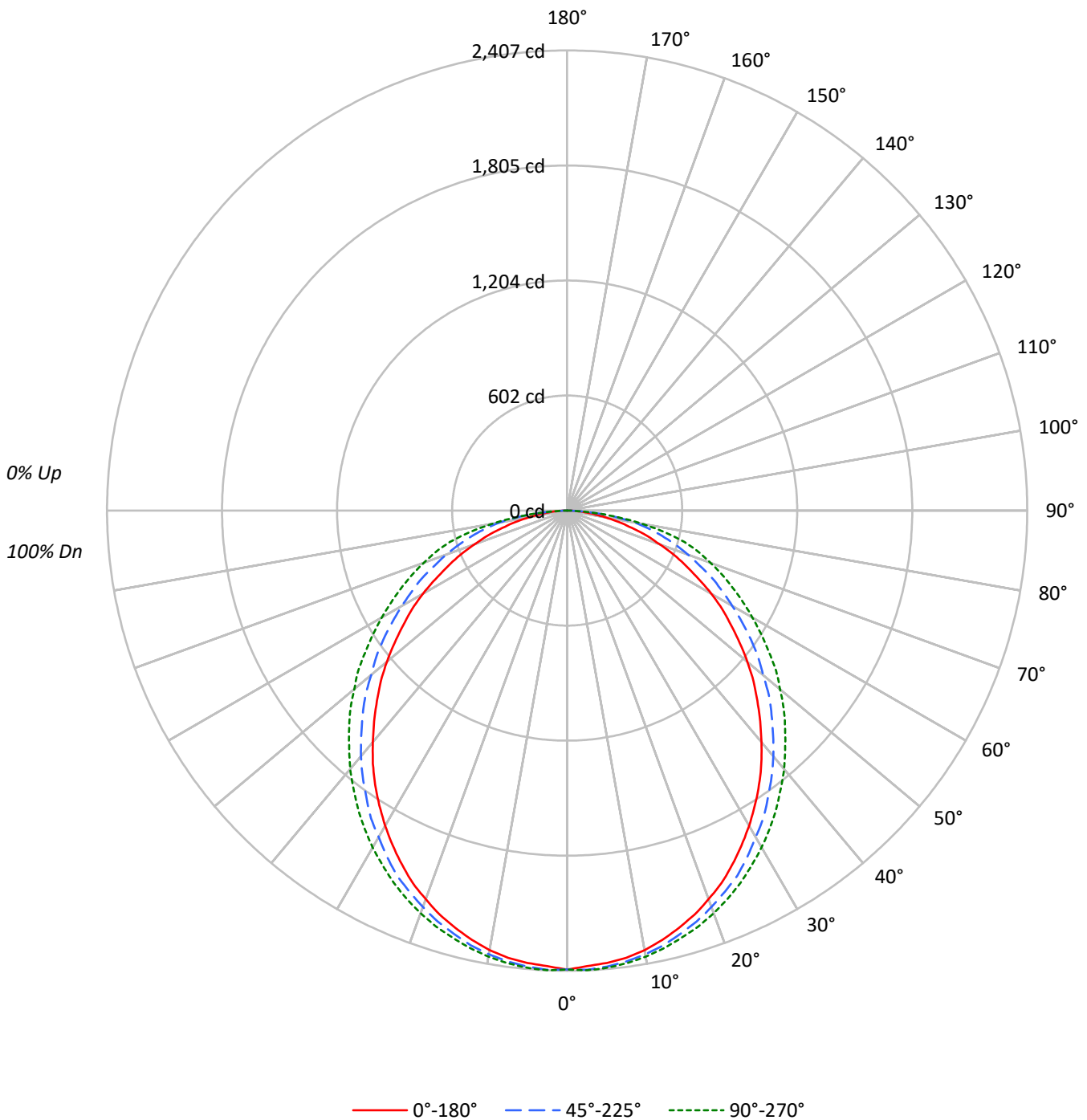
Input Watts (W): 54.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6459	6459	6459
5°	6417	6467	6484
10°	6380	6439	6474
15°	6295	6383	6444
20°	6194	6319	6418
25°	6069	6255	6375
30°	5914	6128	6322
35°	5750	6017	6263
40°	5556	5896	6203
45°	5353	5757	6138
50°	5155	5600	6085
55°	4912	5499	6041
60°	4693	5366	6022
65°	4378	5333	6090
70°	4033	5287	6271
75°	3640	5362	6597
80°	3149	5521	6200
85°	2606	4631	4631



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	227.0	3.4
10°-20°	646.0	9.6
20°-30°	966.6	14.4
30°-40°	1144.7	17.1
40°-50°	1166.6	17.4
50°-60°	1045.6	15.6
60°-70°	818.6	12.2
70°-80°	527.9	7.9
80°-90°	155.9	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°	1839.6	27.5
0°-40°	2984.3	44.5
0°-60°	5196.4	77.6
0°-90°	6698.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6698.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2400	2400	2400	2400	2400	
5°	2375	2382	2394	2397	2400	226
15°	2260	2272	2291	2310	2313	637
25°	2044	2063	2107	2135	2147	941
35°	1750	1772	1832	1888	1907	1094
45°	1406	1438	1513	1591	1613	1086
55°	1047	1081	1172	1253	1288	939
65°	688	728	838	919	956	683
75°	350	403	516	603	634	375
85°	84	116	150	150	150	99
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2400.4	2400.4	2400.4	2400.4	2400.4
2.5°	2384.8	2391.0	2403.5	2406.6	2406.6
5°	2375.4	2381.6	2394.1	2397.3	2400.4
7.5°	2359.8	2362.9	2378.5	2384.8	2387.9
10°	2334.8	2341.0	2356.6	2366.0	2369.1
12.5°	2300.4	2309.7	2328.5	2341.0	2344.1
15°	2259.7	2272.2	2291.0	2309.7	2312.9
17.5°	2216.0	2228.5	2253.5	2275.4	2281.6
20°	2162.9	2178.5	2206.6	2231.6	2241.0
22.5°	2109.7	2122.2	2156.6	2187.9	2197.2
25°	2044.1	2062.8	2106.6	2134.7	2147.2
27.5°	1975.3	1997.2	2041.0	2078.5	2091.0
30°	1903.4	1925.3	1972.2	2019.1	2034.7
32.5°	1828.4	1853.4	1909.7	1956.6	1972.2
35°	1750.3	1772.2	1831.5	1887.8	1906.6
37.5°	1669.0	1687.8	1756.5	1815.9	1834.7
40°	1581.5	1606.5	1678.4	1747.2	1765.9
42.5°	1494.0	1522.1	1594.0	1669.0	1687.8
45°	1406.5	1437.7	1512.7	1590.9	1612.8
47.5°	1322.1	1347.1	1431.5	1506.5	1537.7
50°	1231.4	1256.5	1337.7	1422.1	1453.4
52.5°	1137.7	1172.1	1259.6	1340.8	1378.3
55°	1047.0	1081.4	1172.1	1253.3	1287.7
57.5°	962.7	990.8	1084.6	1168.9	1203.3
60°	872.0	897.0	997.0	1087.7	1118.9
62.5°	775.1	812.6	915.8	1000.2	1037.7
65°	687.6	728.2	837.6	918.9	956.4
67.5°	606.3	643.9	750.1	837.6	878.3
70°	512.6	562.6	672.0	759.5	797.0
72.5°	437.6	481.3	593.8	681.4	722.0
75°	350.1	403.2	515.7	603.2	634.5
77.5°	278.2	331.3	437.6	506.3	522.0
80°	203.2	256.3	356.3	390.7	400.1
82.5°	137.5	187.5	256.3	265.7	268.8
85°	84.4	115.6	150.0	150.0	150.0
87.5°	40.6	46.9	53.1	50.0	50.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)