

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: P389402

Luminaire Tested: **22CZ2-75VHE-S-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: P389402
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-L935-CD1-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: 6713.5 lumens
Efficiency: N/A
Efficacy: 122.7 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

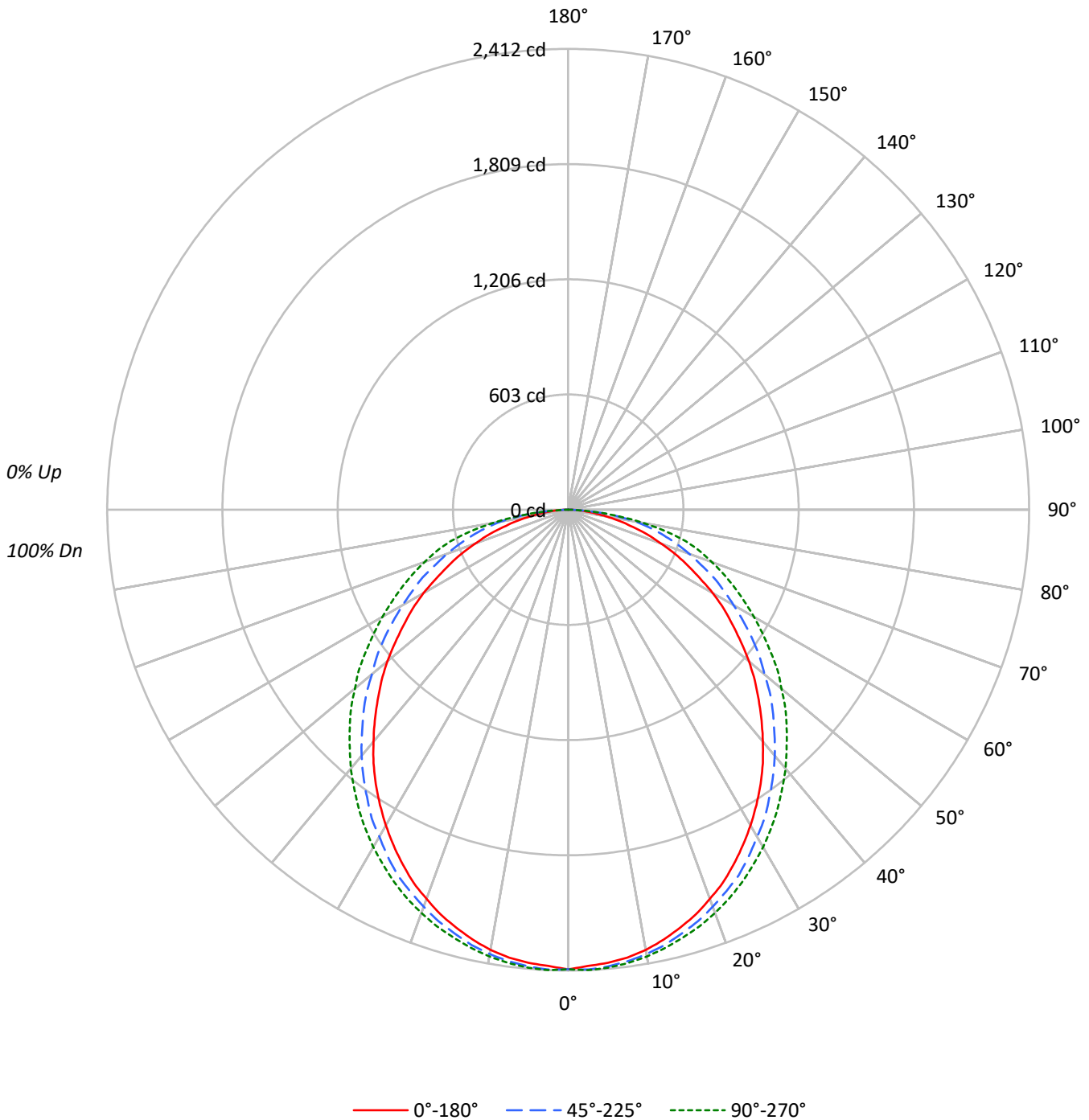
Input Watts (W): 54.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6474	6474	6474
5°	6431	6481	6498
10°	6394	6454	6488
15°	6309	6396	6458
20°	6207	6333	6432
25°	6083	6269	6389
30°	5927	6142	6336
35°	5762	6030	6277
40°	5568	5909	6217
45°	5364	5770	6151
50°	5167	5613	6098
55°	4923	5511	6054
60°	4703	5378	6035
65°	4388	5345	6103
70°	4042	5299	6285
75°	3647	5373	6612
80°	3155	5534	6213
85°	2612	4644	4644



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	227.5	3.4
10°-20°	647.4	9.6
20°-30°	968.7	14.4
30°-40°	1147.2	17.1
40°-50°	1169.1	17.4
50°-60°	1047.9	15.6
60°-70°	820.4	12.2
70°-80°	529.0	7.9
80°-90°	156.3	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°	1843.6	27.5
0°-40°	2990.8	44.5
0°-60°	5207.8	77.6
0°-90°	6713.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6713.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2406	2406	2406	2406	2406	
5°	2381	2387	2399	2402	2406	226
15°	2265	2277	2296	2315	2318	638
25°	2049	2067	2111	2139	2152	943
35°	1754	1776	1836	1892	1911	1096
45°	1410	1441	1516	1594	1616	1089
55°	1049	1084	1175	1256	1290	941
65°	689	730	840	921	958	685
75°	351	404	517	604	636	376
85°	85	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°	2405.7	2405.7	2405.7	2405.7	2405.7
2.5°	2390.0	2396.3	2408.8	2411.9	2411.9
5°	2380.6	2386.9	2399.4	2402.5	2405.7
7.5°	2364.9	2368.1	2383.7	2390.0	2393.1
10°	2339.9	2346.1	2361.8	2371.2	2374.3
12.5°	2305.4	2314.8	2333.6	2346.1	2349.3
15°	2264.7	2277.2	2296.0	2314.8	2318.0
17.5°	2220.8	2233.4	2258.4	2280.4	2286.6
20°	2167.6	2183.3	2211.4	2236.5	2245.9
22.5°	2114.3	2126.9	2161.3	2192.7	2202.1
25°	2048.6	2067.4	2111.2	2139.4	2151.9
27.5°	1979.7	2001.6	2045.4	2083.0	2095.6
30°	1907.6	1929.5	1976.5	2023.5	2039.2
32.5°	1832.4	1857.5	1913.9	1960.9	1976.5
35°	1754.1	1776.1	1835.6	1891.9	1910.7
37.5°	1672.7	1691.5	1760.4	1819.9	1838.7
40°	1585.0	1610.0	1682.1	1751.0	1769.8
42.5°	1497.3	1525.5	1597.5	1672.7	1691.5
45°	1409.6	1440.9	1516.1	1594.4	1616.3
47.5°	1325.0	1350.0	1434.6	1509.8	1541.1
50°	1234.2	1259.2	1340.7	1425.2	1456.5
52.5°	1140.2	1174.6	1262.3	1343.8	1381.4
55°	1049.3	1083.8	1174.6	1256.1	1290.5
57.5°	964.8	993.0	1086.9	1171.5	1206.0
60°	873.9	899.0	999.2	1090.1	1121.4
62.5°	776.8	814.4	917.8	1002.4	1039.9
65°	689.1	729.8	839.5	920.9	958.5
67.5°	607.7	645.3	751.8	839.5	880.2
70°	513.7	563.8	673.5	761.2	798.8
72.5°	438.5	482.4	595.1	682.9	723.6
75°	350.8	404.1	516.8	604.5	635.9
77.5°	278.8	332.0	438.5	507.4	523.1
80°	203.6	256.9	357.1	391.5	400.9
82.5°	137.8	187.9	256.9	266.3	269.4
85°	84.6	115.9	150.4	150.4	150.4
87.5°	40.7	47.0	53.3	50.1	50.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)