

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: P388226

Luminaire Tested: **22CZ2-24VHE-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: P388226
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: 22CZ2-24VHE-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

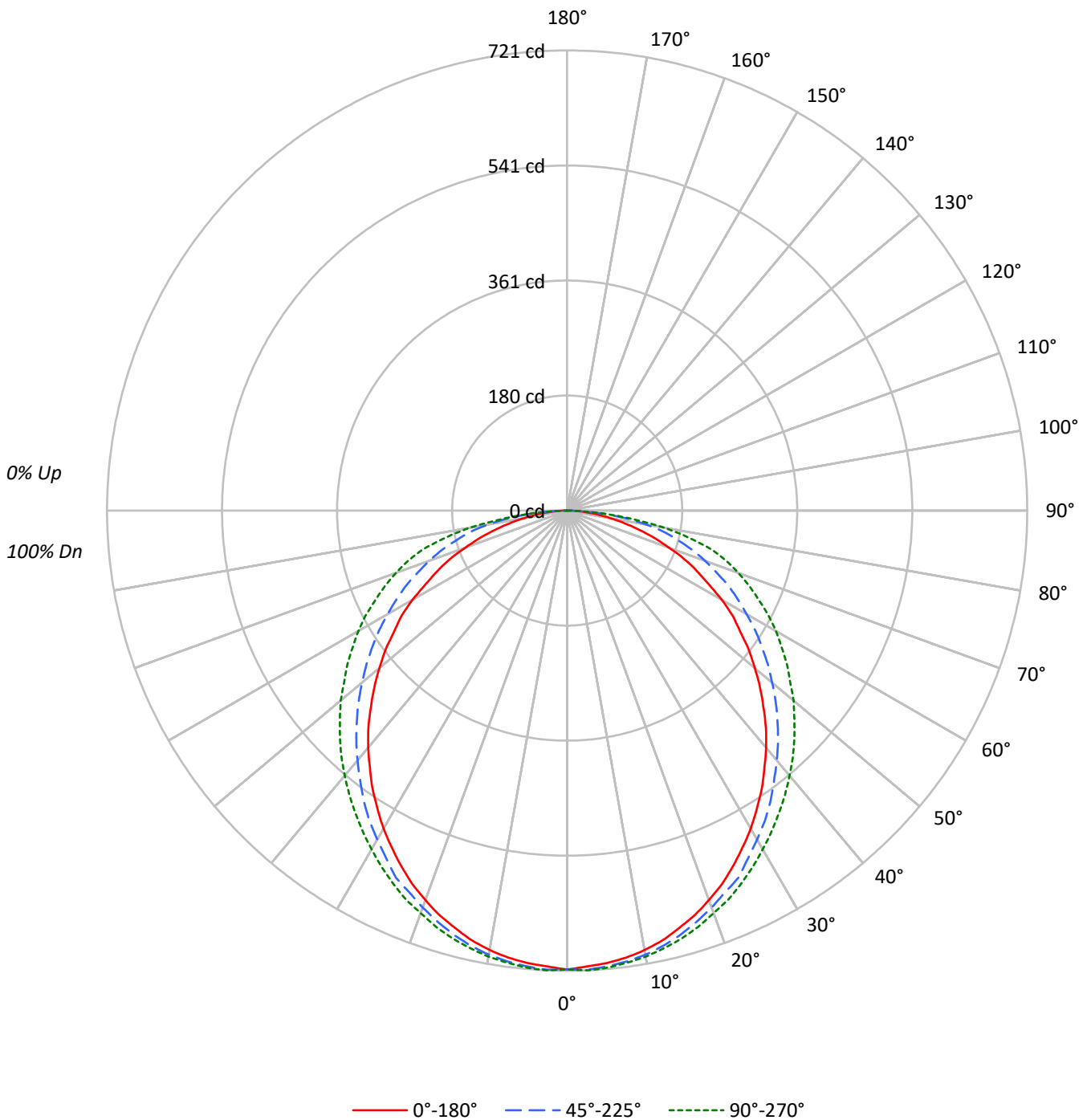
Lumens per Lamp: N/A
Luminaire Lumens: 2114.5 lumens
Efficiency: N/A
Efficacy: 120.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 17.5
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°	1935	1935	1935
5°	1922	1937	1942
10°	1911	1931	1939
15°	1887	1916	1933
20°	1859	1895	1922
25°	1826	1885	1915
30°	1788	1849	1904
35°	1747	1825	1900
40°	1703	1795	1904
45°	1655	1774	1917
50°	1607	1755	1938
55°	1552	1748	1972
60°	1506	1747	2033
65°	1431	1775	2107
70°	1334	1809	2243
75°	1223	1871	2424
80°	1065	1951	2386
85°	932	1735	1896



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.0	3.2
10°-20°	193.7	9.2
20°-30°	290.7	13.7
30°-40°	347.4	16.4
40°-50°	361.2	17.1
50°-60°	334.8	15.8
60°-70°	274.6	13.0
70°-80°	185.7	8.8
80°-90°	58.3	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°	552.4	26.1
0°-40°	899.8	42.6
0°-60°	1595.9	75.5
0°-90°	2114.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2114.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	719	719	719	719	719	
5°	712	713	717	718	719	68
15°	677	680	688	692	694	191
25°	615	620	635	642	645	283
35°	532	539	556	572	578	332
45°	435	443	466	493	504	336
55°	331	341	372	406	420	297
65°	225	237	279	315	331	222
75°	118	137	180	216	233	125
85°	30	42	56	62	61	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	719.0	719.0	719.0	719.0	719.0
2.5°	714.8	716.9	720.0	721.0	721.0
5°	711.7	712.7	716.9	717.9	719.0
7.5°	706.5	708.6	712.7	713.8	714.8
10°	699.2	701.3	706.5	708.6	709.6
12.5°	689.8	691.9	698.2	701.3	702.3
15°	677.3	680.5	687.8	691.9	694.0
17.5°	664.9	668.0	675.3	681.5	683.6
20°	649.3	656.5	661.7	670.1	671.1
22.5°	633.6	637.8	647.2	655.5	659.7
25°	614.9	620.1	634.7	642.0	645.1
27.5°	595.2	602.4	613.9	625.3	629.5
30°	575.4	580.6	595.2	608.7	612.8
32.5°	553.5	560.8	576.4	589.9	596.2
35°	531.7	539.0	555.6	572.3	578.5
37.5°	507.8	516.1	532.7	552.5	560.8
40°	484.9	491.1	510.9	534.8	542.1
42.5°	460.9	468.2	489.0	515.0	523.4
45°	434.9	443.2	466.1	493.2	503.6
47.5°	409.9	418.3	443.2	470.3	482.8
50°	383.9	394.3	419.3	450.5	463.0
52.5°	359.0	368.3	396.4	428.7	440.1
55°	330.9	341.3	372.5	405.8	420.4
57.5°	308.0	315.3	349.6	383.9	398.5
60°	279.9	289.3	324.6	361.0	377.7
62.5°	249.7	265.3	301.7	339.2	355.8
65°	224.7	237.2	278.8	315.3	330.9
67.5°	198.7	212.3	252.8	291.3	309.0
70°	169.6	187.3	229.9	268.4	285.1
72.5°	143.6	162.3	206.0	243.5	261.2
75°	117.6	137.3	180.0	216.4	233.1
77.5°	92.6	114.5	156.1	184.2	194.6
80°	68.7	89.5	125.9	145.7	154.0
82.5°	47.9	65.5	92.6	103.0	105.1
85°	30.2	41.6	56.2	62.4	61.4
87.5°	13.5	16.6	20.8	22.9	21.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)