

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: P388245

Luminaire Tested: **22CZ2-29VHE-UNV-L930-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: P388245
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: 22CZ2-29VHE-UNV-L930-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2506.8 lumens
Efficiency: N/A
Efficacy: 115.5 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

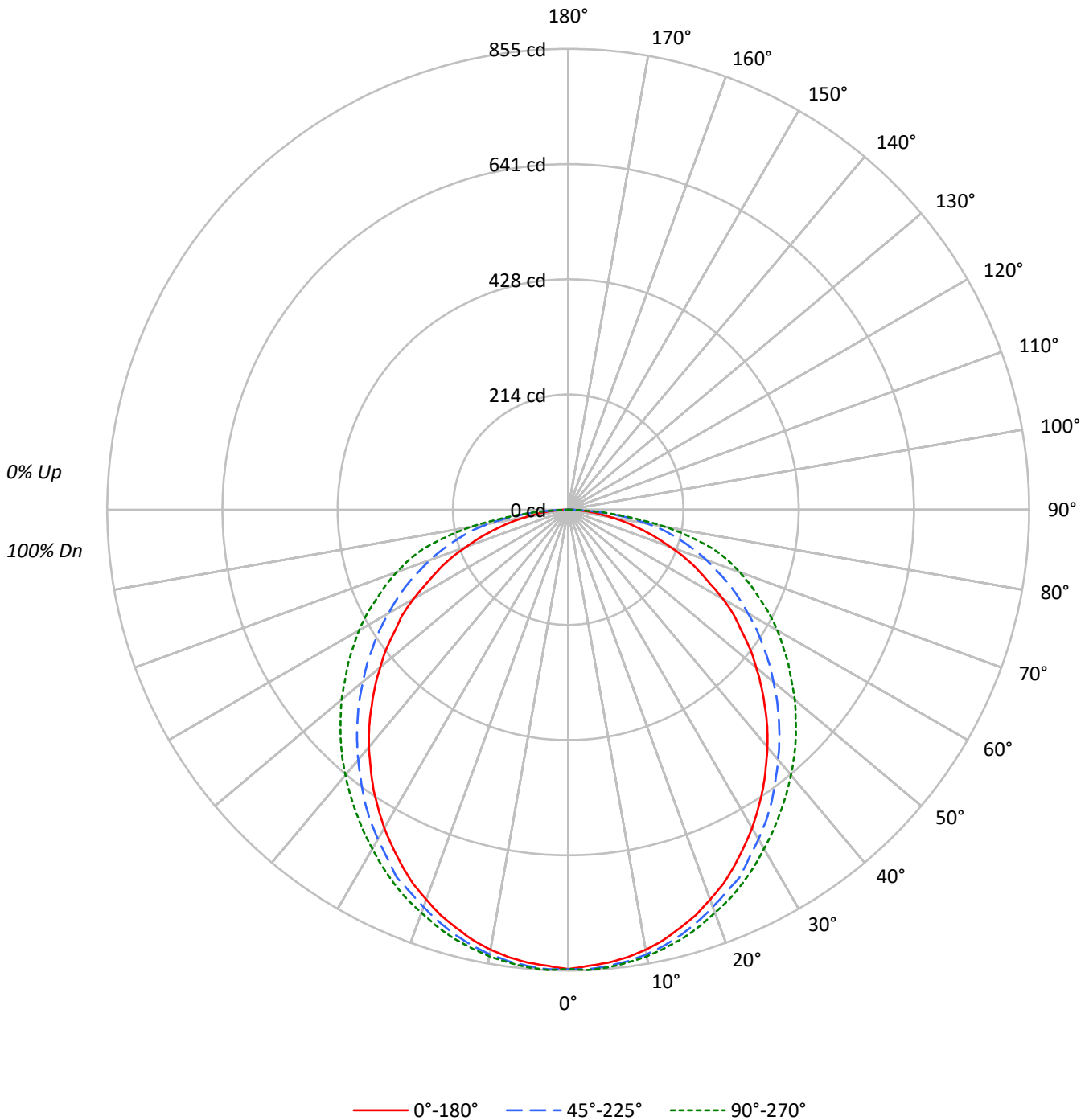
Input Watts (W): 21.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2294	2294	2294
5°	2279	2296	2303
10°	2265	2289	2299
15°	2237	2272	2292
20°	2204	2247	2278
25°	2165	2234	2271
30°	2119	2192	2257
35°	2071	2164	2253
40°	2019	2128	2258
45°	1962	2103	2272
50°	1906	2081	2298
55°	1841	2072	2338
60°	1786	2072	2410
65°	1696	2105	2498
70°	1582	2145	2659
75°	1449	2219	2873
80°	1261	2314	2830
85°	1105	2056	2248



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.6	3.2
10°-20°	229.6	9.2
20°-30°	344.7	13.7
30°-40°	411.9	16.4
40°-50°	428.3	17.1
50°-60°	397.0	15.8
60°-70°	325.6	13.0
70°-80°	220.1	8.8
80°-90°	69.2	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°	654.9	26.1
0°-40°	1066.7	42.6
0°-60°	1892.0	75.5
0°-90°	2506.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2506.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	852	852	852	852	852	
5°	844	845	850	851	852	80
15°	803	807	815	820	823	227
25°	729	735	752	761	765	336
35°	630	639	659	678	686	394
45°	516	526	553	585	597	398
55°	392	405	442	481	498	353
65°	266	281	331	374	392	263
75°	139	163	213	257	276	148
85°	36	49	67	74	73	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	852.4	852.4	852.4	852.4	852.4
2.5°	847.4	849.9	853.6	854.8	854.8
5°	843.7	845.0	849.9	851.1	852.4
7.5°	837.6	840.0	845.0	846.2	847.4
10°	828.9	831.4	837.6	840.0	841.3
12.5°	817.8	820.3	827.7	831.4	832.6
15°	803.0	806.7	815.4	820.3	822.8
17.5°	788.2	791.9	800.6	808.0	810.4
20°	769.7	778.3	784.5	794.4	795.6
22.5°	751.2	756.1	767.2	777.1	782.0
25°	729.0	735.2	752.4	761.1	764.8
27.5°	705.6	714.2	727.8	741.3	746.3
30°	682.1	688.3	705.6	721.6	726.5
32.5°	656.2	664.9	683.4	699.4	706.8
35°	630.3	639.0	658.7	678.4	685.8
37.5°	602.0	611.8	631.6	655.0	664.9
40°	574.8	582.2	605.7	634.0	642.7
42.5°	546.4	555.1	579.8	610.6	620.5
45°	515.6	525.5	552.6	584.7	597.0
47.5°	486.0	495.9	525.5	557.5	572.4
50°	455.2	467.5	497.1	534.1	548.9
52.5°	425.6	436.7	470.0	508.2	521.8
55°	392.3	404.6	441.6	481.1	498.3
57.5°	365.1	373.8	414.5	455.2	472.4
60°	331.8	342.9	384.9	428.0	447.8
62.5°	296.0	314.5	357.7	402.1	421.9
65°	266.4	281.2	330.6	373.8	392.3
67.5°	235.6	251.6	299.7	345.4	366.4
70°	201.1	222.0	272.6	318.2	338.0
72.5°	170.2	192.4	244.2	288.6	309.6
75°	139.4	162.8	213.4	256.6	276.3
77.5°	109.8	135.7	185.0	218.3	230.7
80°	81.4	106.1	149.3	172.7	182.6
82.5°	56.7	77.7	109.8	122.1	124.6
85°	35.8	49.3	66.6	74.0	72.8
87.5°	16.0	19.7	24.7	27.1	25.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)