

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: P389184

Luminaire Tested: **22CZ2-29VHE-S-UNV-L935-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: P389184
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: 22CZ2-29VHE-S-UNV-L935-CD1-SDWPD1-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: 2699.1 lumens
Efficiency: N/A
Efficacy: 124.4 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

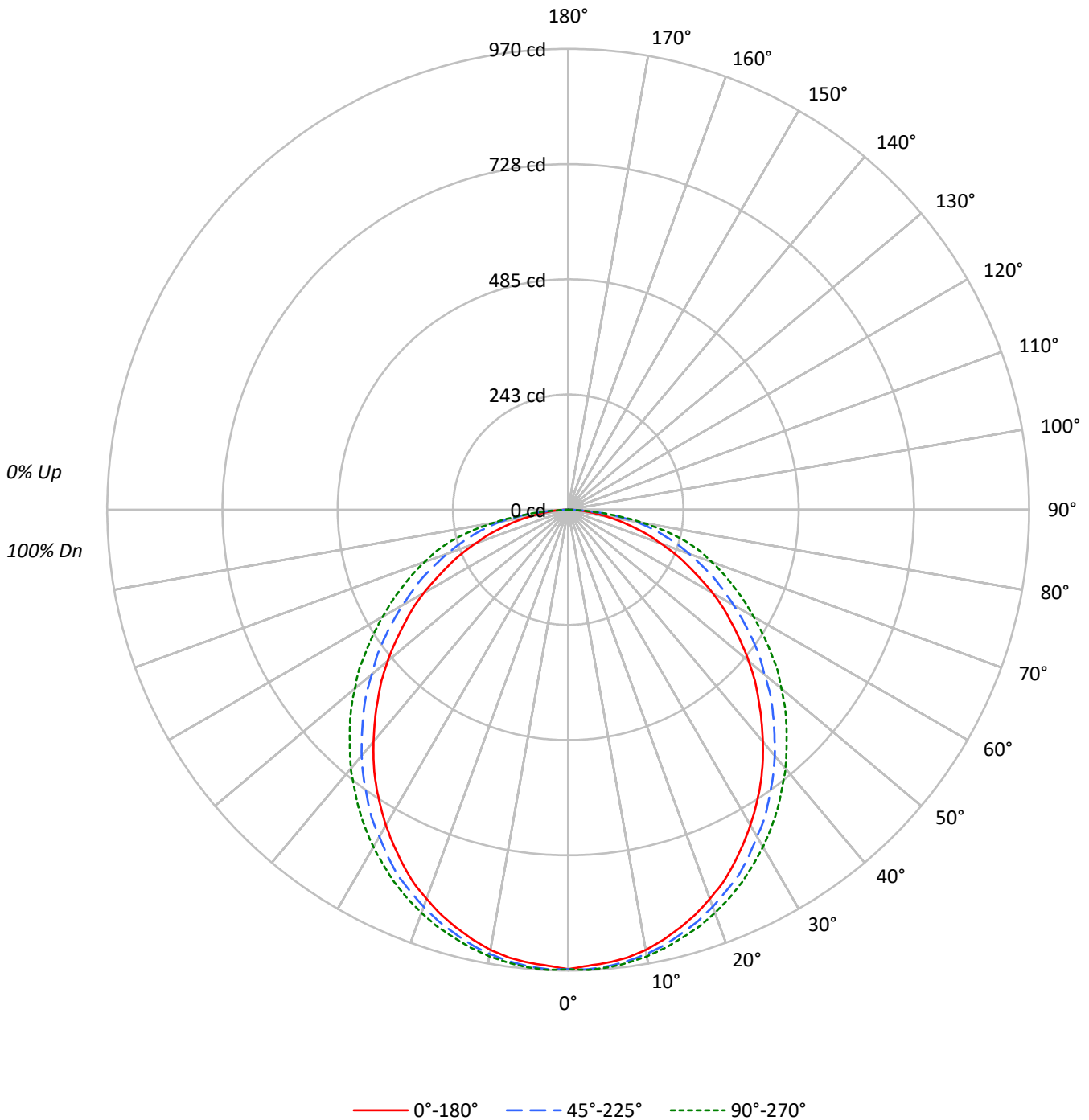
Input Watts (W): 21.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2603	2603	2603
5°	2585	2606	2613
10°	2570	2595	2608
15°	2537	2572	2596
20°	2496	2546	2586
25°	2445	2520	2569
30°	2383	2469	2547
35°	2317	2424	2524
40°	2238	2376	2499
45°	2157	2320	2473
50°	2077	2256	2452
55°	1979	2216	2434
60°	1891	2162	2426
65°	1764	2149	2454
70°	1625	2131	2526
75°	1466	2161	2658
80°	1269	2225	2498
85°	1050	1865	1865



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.5	3.4
10°-20°	260.3	9.6
20°-30°	389.5	14.4
30°-40°	461.2	17.1
40°-50°	470.0	17.4
50°-60°	421.3	15.6
60°-70°	329.8	12.2
70°-80°	212.7	7.9
80°-90°	62.8	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°	741.2	27.5
0°-40°	1202.4	44.5
0°-60°	2093.8	77.6
0°-90°	2699.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2699.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	967	967	967	967	967	
5°	957	960	965	966	967	91
15°	910	916	923	931	932	257
25°	824	831	849	860	865	379
35°	705	714	738	761	768	441
45°	567	579	610	641	650	438
55°	422	436	472	505	519	378
65°	277	293	338	370	385	275
75°	141	162	208	243	256	151
85°	34	47	60	60	60	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	967.2	967.2	967.2	967.2	967.2
2.5°	960.9	963.4	968.4	969.7	969.7
5°	957.1	959.6	964.7	965.9	967.2
7.5°	950.8	952.1	958.4	960.9	962.1
10°	940.7	943.2	949.5	953.3	954.6
12.5°	926.9	930.7	938.2	943.2	944.5
15°	910.5	915.5	923.1	930.7	931.9
17.5°	892.9	897.9	908.0	916.8	919.3
20°	871.5	877.8	889.1	899.2	902.9
22.5°	850.1	855.1	868.9	881.5	885.3
25°	823.6	831.2	848.8	860.1	865.2
27.5°	795.9	804.7	822.3	837.5	842.5
30°	766.9	775.8	794.6	813.5	819.8
32.5°	736.7	746.8	769.5	788.3	794.6
35°	705.2	714.0	738.0	760.6	768.2
37.5°	672.5	680.0	707.7	731.7	739.2
40°	637.2	647.3	676.3	704.0	711.5
42.5°	602.0	613.3	642.3	672.5	680.0
45°	566.7	579.3	609.5	641.0	649.8
47.5°	532.7	542.8	576.8	607.0	619.6
50°	496.2	506.3	539.0	573.0	585.6
52.5°	458.4	472.3	507.5	540.3	555.4
55°	421.9	435.7	472.3	505.0	518.8
57.5°	387.9	399.2	437.0	471.0	484.8
60°	351.4	361.4	401.7	438.2	450.8
62.5°	312.3	327.4	369.0	403.0	418.1
65°	277.1	293.4	337.5	370.2	385.4
67.5°	244.3	259.4	302.2	337.5	353.9
70°	206.5	226.7	270.8	306.0	321.1
72.5°	176.3	193.9	239.3	274.5	290.9
75°	141.0	162.5	207.8	243.1	255.6
77.5°	112.1	133.5	176.3	204.0	210.3
80°	81.9	103.3	143.6	157.4	161.2
82.5°	55.4	75.6	103.3	107.0	108.3
85°	34.0	46.6	60.4	60.4	60.4
87.5°	16.4	18.9	21.4	20.1	20.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)