

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: P387840

Luminaire Tested: **22CZ2-32-SQR-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: P387840
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-542-6)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-32-SQR-UNV-L930-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2535.8 lumens
Efficiency: N/A
Efficacy: 95.0 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

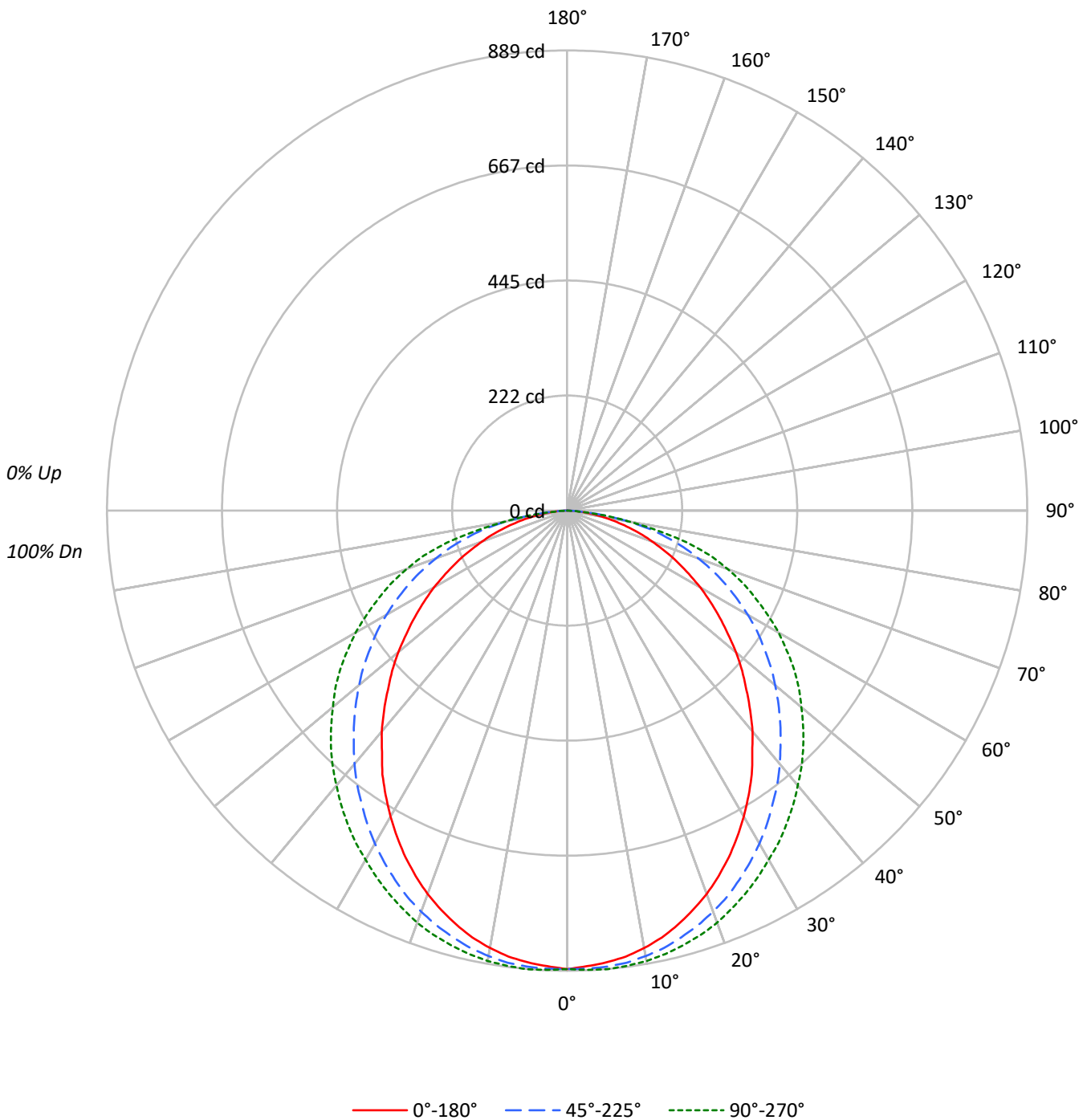
Input Watts (W): 26.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	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	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2384	2384	2384
5°	2367	2390	2402
10°	2345	2388	2414
15°	2307	2377	2421
20°	2257	2361	2426
25°	2194	2337	2423
30°	2120	2307	2420
35°	2044	2273	2428
40°	1957	2245	2435
45°	1864	2217	2455
50°	1784	2197	2474
55°	1688	2180	2513
60°	1600	2170	2539
65°	1494	2153	2560
70°	1373	2121	2595
75°	1239	2065	2503
80°	1063	1827	1884
85°	855	1078	855



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.0	3.3
10°-20°	240.1	9.5
20°-30°	360.6	14.2
30°-40°	430.1	17.0
40°-50°	444.7	17.5
50°-60°	408.8	16.1
60°-70°	325.5	12.8
70°-80°	198.8	7.8
80°-90°	43.2	1.7
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°	684.7	27.0
0°-40°	1114.8	44.0
0°-60°	1968.3	77.6
0°-90°	2535.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2535.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	886	886	886	886	886	
5°	876	879	885	888	889	83
15°	828	838	853	865	869	233
25°	739	757	787	809	816	340
35°	622	649	692	728	739	388
45°	490	525	582	630	645	379
55°	360	400	465	518	536	322
65°	235	274	338	385	402	232
75°	119	154	199	234	241	127
85°	28	34	35	30	28	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	885.8	885.8	885.8	885.8	885.8
2.5°	881.0	882.2	885.8	888.2	888.2
5°	876.2	878.6	884.6	888.2	889.4
7.5°	869.0	872.6	881.0	885.8	887.0
10°	858.1	862.9	873.8	881.0	883.4
12.5°	844.9	852.1	865.4	875.0	877.4
15°	828.0	837.7	853.3	865.4	869.0
17.5°	808.8	820.8	840.1	854.5	859.3
20°	788.3	800.4	824.4	841.3	847.3
22.5°	764.3	779.9	807.6	826.8	831.7
25°	739.0	757.0	787.1	808.8	816.0
27.5°	711.3	733.0	765.5	791.9	798.0
30°	682.4	705.3	742.6	771.5	778.7
32.5°	652.3	678.8	718.5	751.0	760.6
35°	622.2	648.7	692.0	728.2	739.0
37.5°	587.3	618.6	666.8	704.1	717.3
40°	557.2	587.3	639.1	680.0	693.2
42.5°	523.5	556.0	610.2	654.7	670.4
45°	489.8	524.7	582.5	629.5	645.1
47.5°	458.6	493.5	553.6	603.0	618.6
50°	426.1	462.2	524.7	575.3	590.9
52.5°	391.2	430.9	495.9	546.4	564.5
55°	359.9	399.6	464.6	517.5	535.6
57.5°	327.4	368.3	435.7	486.2	503.1
60°	297.3	337.0	403.2	452.5	471.8
62.5°	264.8	305.7	370.7	418.8	436.9
65°	234.7	274.4	338.2	385.1	402.0
67.5°	204.6	244.3	304.5	349.0	368.3
70°	174.5	214.2	269.6	312.9	329.8
72.5°	148.0	182.9	235.9	275.6	291.3
75°	119.2	154.1	198.6	233.5	240.7
77.5°	92.7	124.0	161.3	176.9	179.3
80°	68.6	92.7	117.9	121.6	121.6
82.5°	45.7	63.8	73.4	74.6	73.4
85°	27.7	33.7	34.9	30.1	27.7
87.5°	9.6	9.6	6.0	3.6	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)