

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: P387844

Luminaire Tested: **22CZ2-32-SQR-UNV-L935-CD1-SWPD1-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: P387844
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-L935-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2630.3 lumens
Efficiency: N/A
Efficacy: 98.5 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

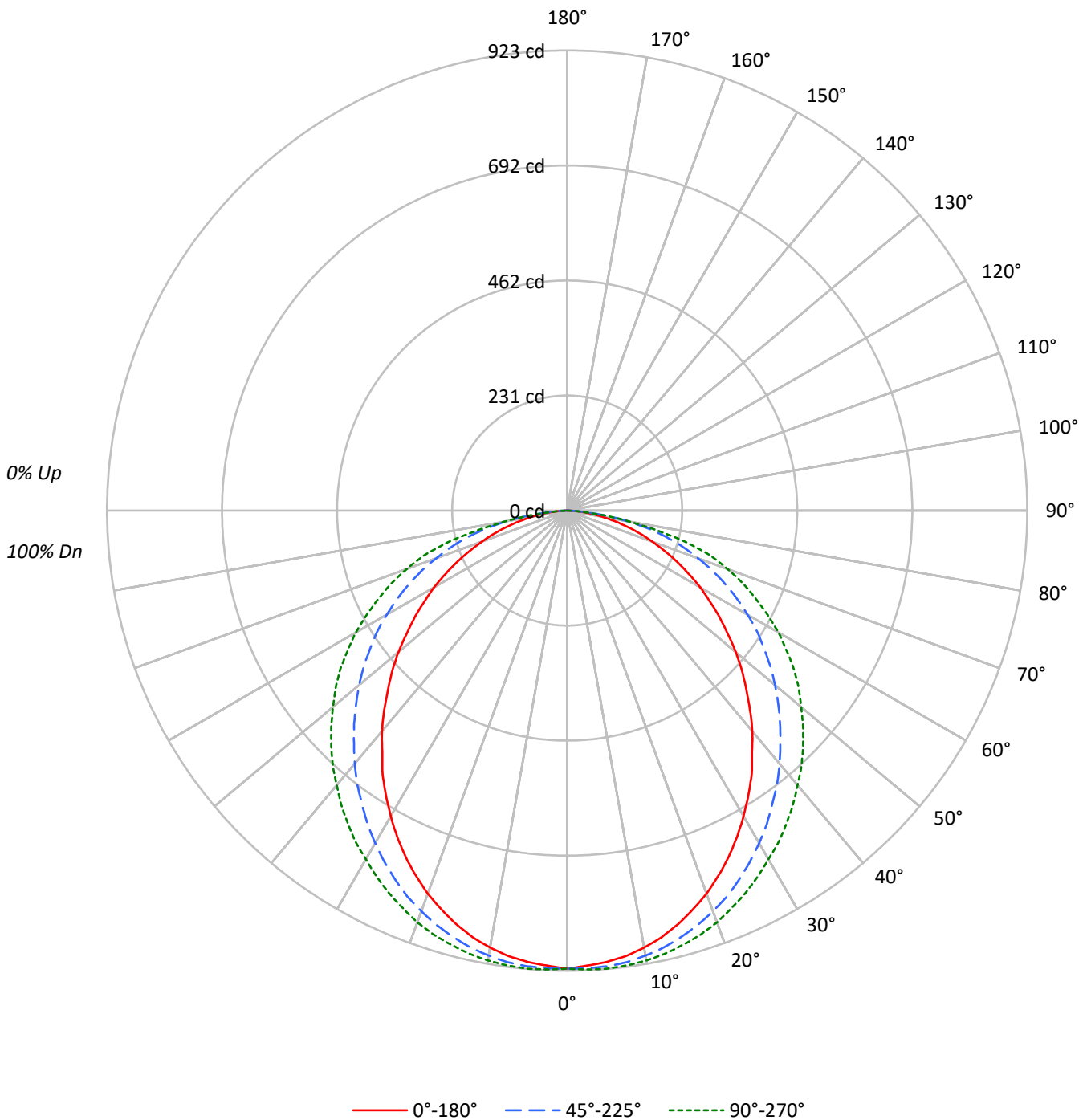
Input Watts (W): 26.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2472	2472	2472
5°	2455	2479	2492
10°	2432	2476	2504
15°	2393	2466	2511
20°	2342	2449	2517
25°	2276	2424	2513
30°	2199	2394	2510
35°	2120	2358	2518
40°	2030	2329	2526
45°	1934	2299	2546
50°	1850	2279	2566
55°	1751	2261	2606
60°	1660	2251	2634
65°	1550	2234	2655
70°	1424	2200	2692
75°	1285	2142	2596
80°	1103	1895	1954
85°	886	1118	886



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.1	3.3
10°-20°	249.0	9.5
20°-30°	374.1	14.2
30°-40°	446.1	17.0
40°-50°	461.2	17.5
50°-60°	424.1	16.1
60°-70°	337.6	12.8
70°-80°	206.3	7.8
80°-90°	44.8	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°	710.2	27.0
0°-40°	1156.3	44.0
0°-60°	2041.6	77.6
0°-90°	2630.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2630.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	919	919	919	919	919	
5°	909	911	918	921	923	86
15°	859	869	885	898	901	242
25°	766	785	816	839	846	353
35°	645	673	718	755	766	403
45°	508	544	604	653	669	393
55°	373	414	482	537	556	334
65°	243	285	351	400	417	241
75°	124	160	206	242	250	132
85°	29	35	36	31	29	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	918.8	918.8	918.8	918.8	918.8
2.5°	913.8	915.1	918.8	921.3	921.3
5°	908.8	911.3	917.6	921.3	922.6
7.5°	901.3	905.1	913.8	918.8	920.1
10°	890.1	895.1	906.3	913.8	916.3
12.5°	876.4	883.9	897.6	907.6	910.1
15°	858.9	868.9	885.1	897.6	901.3
17.5°	838.9	851.4	871.4	886.4	891.4
20°	817.7	830.2	855.2	872.6	878.9
22.5°	792.7	809.0	837.7	857.7	862.6
25°	766.5	785.2	816.5	838.9	846.4
27.5°	737.8	760.3	794.0	821.5	827.7
30°	707.8	731.6	770.3	800.2	807.7
32.5°	676.6	704.1	745.3	779.0	789.0
35°	645.4	672.9	717.8	755.3	766.5
37.5°	609.2	641.7	691.6	730.3	744.1
40°	578.0	609.2	662.9	705.3	719.1
42.5°	543.1	576.8	632.9	679.1	695.4
45°	508.1	544.3	604.2	652.9	669.1
47.5°	475.6	511.8	574.3	625.5	641.7
50°	441.9	479.4	544.3	596.7	613.0
52.5°	405.7	446.9	514.3	566.8	585.5
55°	373.3	414.5	481.9	536.8	555.5
57.5°	339.6	382.0	451.9	504.4	521.8
60°	308.4	349.6	418.2	469.4	489.4
62.5°	274.6	317.1	384.5	434.4	453.2
65°	243.4	284.6	350.8	399.5	417.0
67.5°	212.2	253.4	315.8	362.0	382.0
70°	181.0	222.2	279.6	324.6	342.1
72.5°	153.6	189.8	244.7	285.9	302.1
75°	123.6	159.8	206.0	242.2	249.7
77.5°	96.1	128.6	167.3	183.5	186.0
80°	71.2	96.1	122.3	126.1	126.1
82.5°	47.4	66.2	76.2	77.4	76.2
85°	28.7	35.0	36.2	31.2	28.7
87.5°	10.0	10.0	6.2	3.7	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)