

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: P389254

Luminaire Tested: **22CZ2-44VHE-S-UNV-L930-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: P389254
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: 22CZ2-44VHE-S-UNV-L930-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3955.5 lumens
Efficiency: N/A
Efficacy: 121.3 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

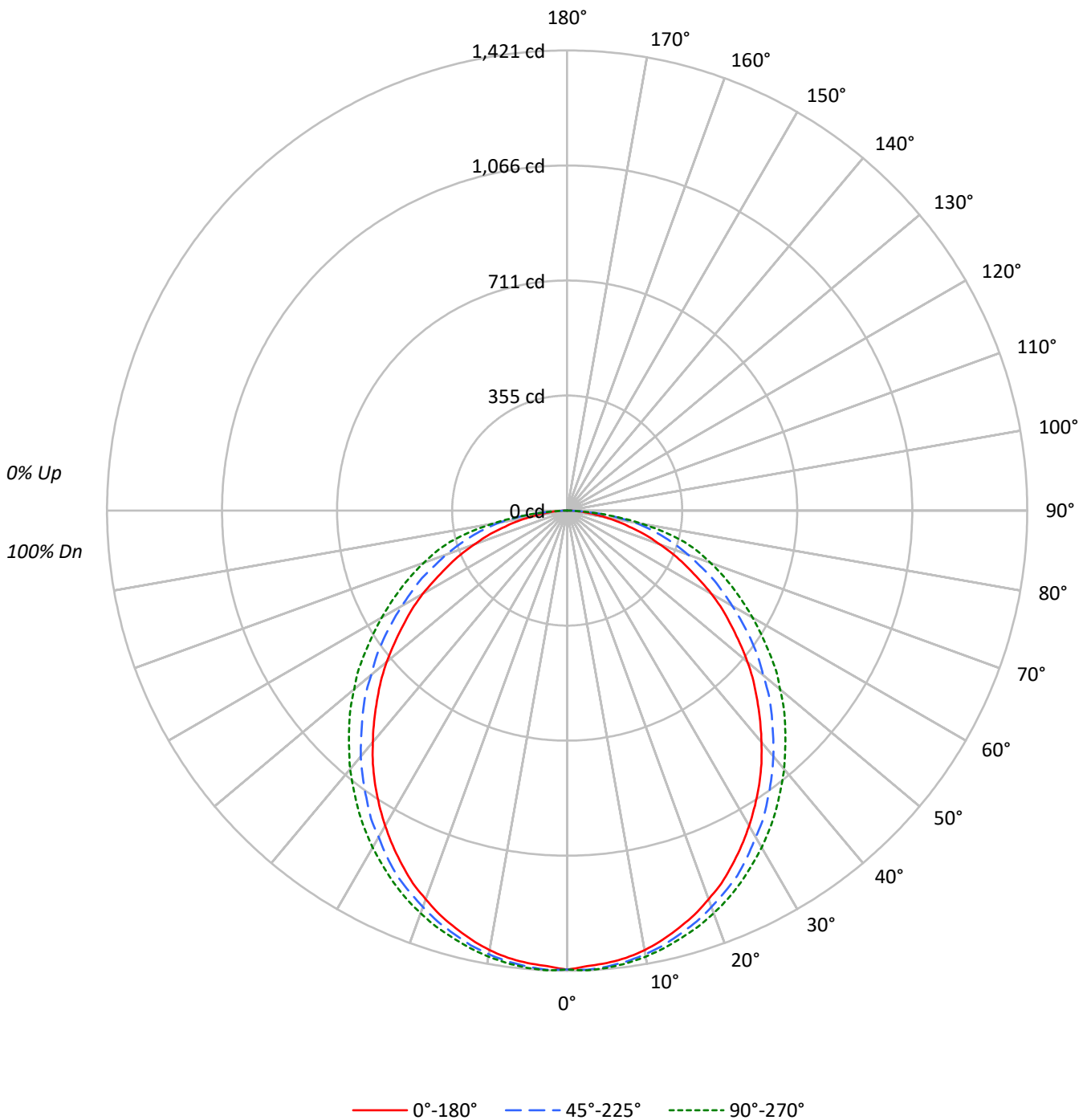
Input Watts (W): 32.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	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	69	60	54	66	59	53	64	57	52	61	56	52	49					49			
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27					27			
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3814	3814	3814
5°	3789	3819	3829
10°	3767	3802	3822
15°	3717	3769	3805
20°	3657	3731	3790
25°	3584	3693	3765
30°	3492	3618	3733
35°	3395	3553	3698
40°	3280	3482	3663
45°	3161	3399	3624
50°	3044	3307	3593
55°	2901	3247	3567
60°	2771	3168	3556
65°	2585	3149	3596
70°	2382	3122	3703
75°	2149	3166	3895
80°	1860	3261	3660
85°	1538	2736	2736



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.0	3.4
10°-20°	381.5	9.6
20°-30°	570.7	14.4
30°-40°	675.9	17.1
40°-50°	688.8	17.4
50°-60°	617.4	15.6
60°-70°	483.4	12.2
70°-80°	311.7	7.9
80°-90°	92.1	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°	1086.2	27.5
0°-40°	1762.1	44.5
0°-60°	3068.4	77.6
0°-90°	3955.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3955.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1417	1417	1417	1417	1417	
5°	1403	1406	1414	1416	1417	133
15°	1334	1342	1353	1364	1366	376
25°	1207	1218	1244	1260	1268	556
35°	1034	1046	1082	1115	1126	646
45°	830	849	893	939	952	641
55°	618	639	692	740	760	554
65°	406	430	495	543	565	403
75°	207	238	304	356	375	222
85°	50	68	89	89	89	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1417.4	1417.4	1417.4	1417.4	1417.4
2.5°	1408.2	1411.8	1419.2	1421.1	1421.1
5°	1402.6	1406.3	1413.7	1415.5	1417.4
7.5°	1393.4	1395.2	1404.5	1408.2	1410.0
10°	1378.6	1382.3	1391.5	1397.1	1398.9
12.5°	1358.3	1363.9	1374.9	1382.3	1384.2
15°	1334.3	1341.7	1352.8	1363.9	1365.7
17.5°	1308.5	1315.9	1330.6	1343.6	1347.2
20°	1277.1	1286.3	1303.0	1317.7	1323.3
22.5°	1245.7	1253.1	1273.4	1291.9	1297.4
25°	1207.0	1218.1	1243.9	1260.5	1267.9
27.5°	1166.4	1179.3	1205.1	1227.3	1234.7
30°	1123.9	1136.9	1164.5	1192.2	1201.5
32.5°	1079.6	1094.4	1127.6	1155.3	1164.5
35°	1033.5	1046.4	1081.5	1114.7	1125.8
37.5°	985.5	996.6	1037.2	1072.3	1083.3
40°	933.8	948.6	991.1	1031.7	1042.7
42.5°	882.2	898.8	941.2	985.5	996.6
45°	830.5	849.0	893.2	939.4	952.3
47.5°	780.7	795.4	845.3	889.6	908.0
50°	727.1	741.9	789.9	839.7	858.2
52.5°	671.8	692.1	743.8	791.7	813.9
55°	618.3	638.6	692.1	740.1	760.4
57.5°	568.4	585.0	640.4	690.2	710.5
60°	514.9	529.7	588.7	642.2	660.7
62.5°	457.7	479.8	540.7	590.6	612.7
65°	406.0	430.0	494.6	542.6	564.7
67.5°	358.0	380.2	442.9	494.6	518.6
70°	302.7	332.2	396.8	448.5	470.6
72.5°	258.4	284.2	350.7	402.3	426.3
75°	206.7	238.1	304.5	356.2	374.6
77.5°	164.3	195.6	258.4	299.0	308.2
80°	120.0	151.3	210.4	230.7	236.2
82.5°	81.2	110.7	151.3	156.9	158.7
85°	49.8	68.3	88.6	88.6	88.6
87.5°	24.0	27.7	31.4	29.5	29.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)