

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: P388343

Luminaire Tested: **22CZ2-50VHE-UNV-L930-CD1-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: P388343
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: 22CZ2-50VHE-UNV-L930-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

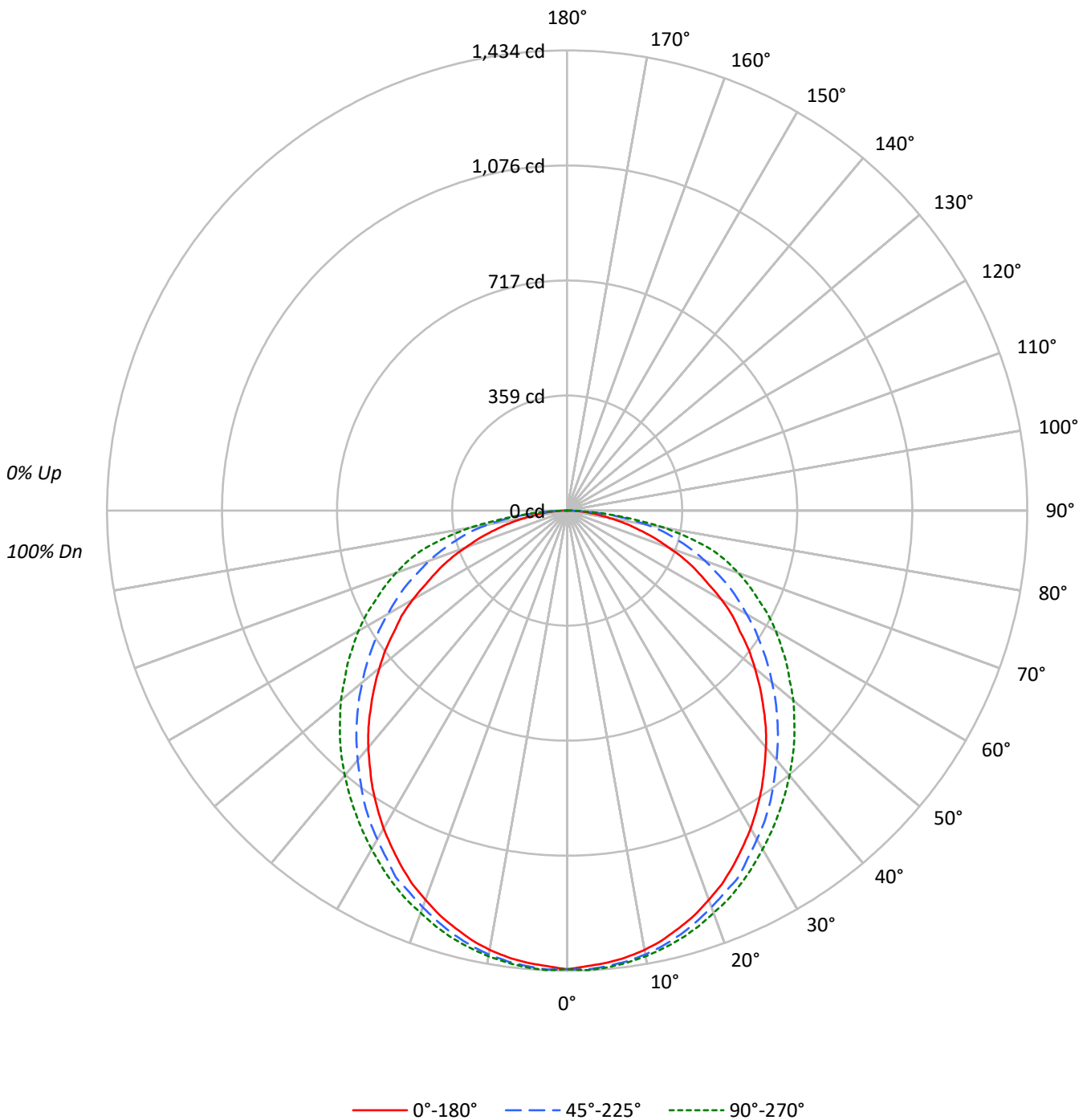
Lumens per Lamp: N/A
Luminaire Lumens: 4203.7 lumens
Efficiency: N/A
Efficacy: 116.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 36.2
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	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82					82			
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68					68			
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56					56			
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48					48			
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41					41			
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36					36			
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32					32			
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28					28			
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25					25			
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3846	3846	3846
5°	3822	3850	3861
10°	3798	3838	3855
15°	3752	3809	3844
20°	3696	3767	3821
25°	3630	3746	3808
30°	3554	3677	3786
35°	3472	3629	3778
40°	3386	3568	3786
45°	3290	3527	3810
50°	3195	3490	3854
55°	3086	3474	3921
60°	2995	3474	4041
65°	2845	3530	4188
70°	2653	3596	4460
75°	2430	3721	4817
80°	2115	3879	4744
85°	1853	3449	3767



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.2	3.2
10°-20°	385.0	9.2
20°-30°	578.0	13.7
30°-40°	690.7	16.4
40°-50°	718.2	17.1
50°-60°	665.6	15.8
60°-70°	546.0	13.0
70°-80°	369.1	8.8
80°-90°	116.0	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°	1098.2	26.1
0°-40°	1788.9	42.6
0°-60°	3172.7	75.5
0°-90°	4203.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4203.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1429	1429	1429	1429	1429	
5°	1415	1417	1425	1427	1429	134
15°	1347	1353	1367	1376	1380	380
25°	1222	1233	1262	1276	1282	563
35°	1057	1072	1105	1138	1150	661
45°	865	881	927	980	1001	668
55°	658	678	740	807	836	591
65°	447	472	554	627	658	442
75°	234	273	358	430	463	248
85°	60	83	112	124	122	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1429.3	1429.3	1429.3	1429.3	1429.3
2.5°	1421.1	1425.2	1431.4	1433.5	1433.5
5°	1414.9	1416.9	1425.2	1427.3	1429.3
7.5°	1404.5	1408.7	1416.9	1419.0	1421.1
10°	1390.0	1394.2	1404.5	1408.7	1410.7
12.5°	1371.4	1375.6	1388.0	1394.2	1396.2
15°	1346.6	1352.8	1367.3	1375.6	1379.7
17.5°	1321.8	1328.0	1342.5	1354.9	1359.0
20°	1290.7	1305.2	1315.6	1332.1	1334.2
22.5°	1259.7	1268.0	1286.6	1303.2	1311.4
25°	1222.5	1232.8	1261.8	1276.3	1282.5
27.5°	1183.2	1197.7	1220.4	1243.2	1251.4
30°	1143.9	1154.2	1183.2	1210.1	1218.3
32.5°	1100.4	1114.9	1146.0	1172.8	1185.3
35°	1057.0	1071.5	1104.6	1137.7	1150.1
37.5°	1009.4	1026.0	1059.1	1098.4	1114.9
40°	963.9	976.3	1015.6	1063.2	1077.7
42.5°	916.3	930.8	972.2	1023.9	1040.5
45°	864.6	881.2	926.7	980.5	1001.2
47.5°	815.0	831.5	881.2	935.0	959.8
50°	763.3	784.0	833.6	895.7	920.5
52.5°	713.6	732.2	788.1	852.2	875.0
55°	657.8	678.5	740.5	806.7	835.7
57.5°	612.3	626.8	695.0	763.3	792.2
60°	556.4	575.0	645.4	717.8	750.9
62.5°	496.4	527.5	599.9	674.3	707.4
65°	446.8	471.6	554.4	626.8	657.8
67.5°	395.1	422.0	502.6	579.2	614.3
70°	337.2	372.3	457.1	533.7	566.8
72.5°	285.5	322.7	409.6	484.0	519.2
75°	233.7	273.0	357.9	430.2	463.3
77.5°	184.1	227.5	310.3	366.1	386.8
80°	136.5	177.9	250.3	289.6	306.1
82.5°	95.2	130.3	184.1	204.8	208.9
85°	60.0	82.7	111.7	124.1	122.0
87.5°	26.9	33.1	41.4	45.5	43.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)