

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: P388349

Luminaire Tested: **22CZ2-50VHE-UNV-L940-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: P388349
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-L940-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

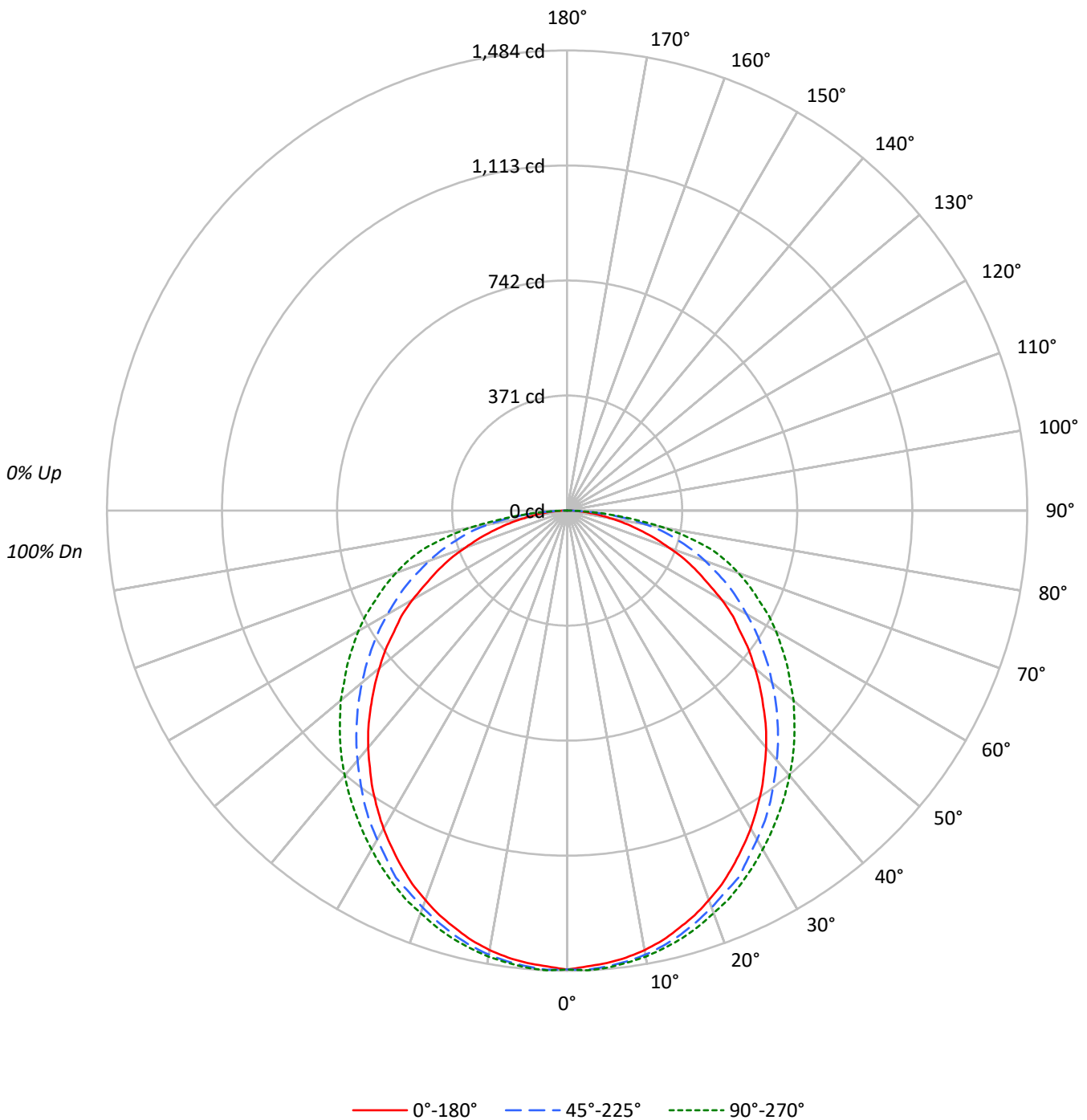
Lumens per Lamp: N/A
Luminaire Lumens: 4352.3 lumens
Efficiency: N/A
Efficacy: 120.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	108	103	98	94	105	101	96	93	96	93	90		92	90	87		89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73		80	76	71		77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61		70	65	60		68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52		63	56	51		60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44		56	49	44		54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39		51	44	39		49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34		46	39	34		45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31		42	35	30		41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28		39	32	27		38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25		36	30	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3982	3982	3982
5°	3957	3986	3998
10°	3933	3974	3991
15°	3884	3944	3980
20°	3827	3901	3956
25°	3758	3879	3942
30°	3680	3806	3920
35°	3595	3757	3912
40°	3506	3694	3920
45°	3407	3651	3945
50°	3309	3613	3990
55°	3195	3597	4059
60°	3101	3596	4184
65°	2946	3655	4336
70°	2747	3724	4617
75°	2516	3852	4988
80°	2190	4015	4912
85°	1917	3569	3903



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.0	3.2
10°-20°	398.6	9.2
20°-30°	598.4	13.7
30°-40°	715.1	16.4
40°-50°	743.5	17.1
50°-60°	689.2	15.8
60°-70°	565.3	13.0
70°-80°	382.1	8.8
80°-90°	120.1	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°	1137.0	26.1
0°-40°	1852.1	42.6
0°-60°	3284.8	75.5
0°-90°	4352.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4352.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1480	1480	1480	1480	1480	
5°	1465	1467	1476	1478	1480	139
15°	1394	1401	1416	1424	1428	393
25°	1266	1276	1306	1321	1328	583
35°	1094	1109	1144	1178	1191	684
45°	895	912	959	1015	1036	691
55°	681	702	767	835	865	612
65°	463	488	574	649	681	457
75°	242	283	370	446	480	257
85°	62	86	116	128	126	70
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1479.9	1479.9	1479.9	1479.9	1479.9
2.5°	1471.3	1475.6	1482.0	1484.1	1484.1
5°	1464.9	1467.0	1475.6	1477.7	1479.9
7.5°	1454.2	1458.4	1467.0	1469.2	1471.3
10°	1439.2	1443.5	1454.2	1458.4	1460.6
12.5°	1419.9	1424.2	1437.0	1443.5	1445.6
15°	1394.2	1400.6	1415.6	1424.2	1428.5
17.5°	1368.5	1374.9	1389.9	1402.8	1407.0
20°	1336.4	1351.4	1362.1	1379.2	1381.3
22.5°	1304.2	1312.8	1332.1	1349.2	1357.8
25°	1265.7	1276.4	1306.4	1321.4	1327.8
27.5°	1225.0	1240.0	1263.6	1287.1	1295.7
30°	1184.3	1195.0	1225.0	1252.9	1261.4
32.5°	1139.3	1154.3	1186.5	1214.3	1227.2
35°	1094.4	1109.4	1143.6	1177.9	1190.7
37.5°	1045.1	1062.2	1096.5	1137.2	1154.3
40°	998.0	1010.8	1051.5	1100.8	1115.8
42.5°	948.7	963.7	1006.6	1060.1	1077.2
45°	895.2	912.3	959.4	1015.1	1036.5
47.5°	843.8	860.9	912.3	968.0	993.7
50°	790.3	811.7	863.1	927.3	953.0
52.5°	738.9	758.1	816.0	882.3	905.9
55°	681.0	702.5	766.7	835.2	865.2
57.5°	633.9	648.9	719.6	790.3	820.2
60°	576.1	595.4	668.2	743.1	777.4
62.5°	514.0	546.1	621.1	698.2	732.4
65°	462.6	488.3	574.0	648.9	681.0
67.5°	409.1	436.9	520.4	599.7	636.1
70°	349.1	385.5	473.3	552.5	586.8
72.5°	295.5	334.1	424.0	501.1	537.5
75°	242.0	282.7	370.5	445.5	479.7
77.5°	190.6	235.6	321.2	379.1	400.5
80°	141.3	184.2	259.1	299.8	317.0
82.5°	98.5	134.9	190.6	212.0	216.3
85°	62.1	85.7	115.6	128.5	126.4
87.5°	27.8	34.3	42.8	47.1	45.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)