

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: P388440

Luminaire Tested: **22CZ2-70VHE-UNV-L935-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: P388440
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: 22CZ2-70VHE-UNV-L935-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5788.5 lumens
Efficiency: N/A
Efficacy: 115.1 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

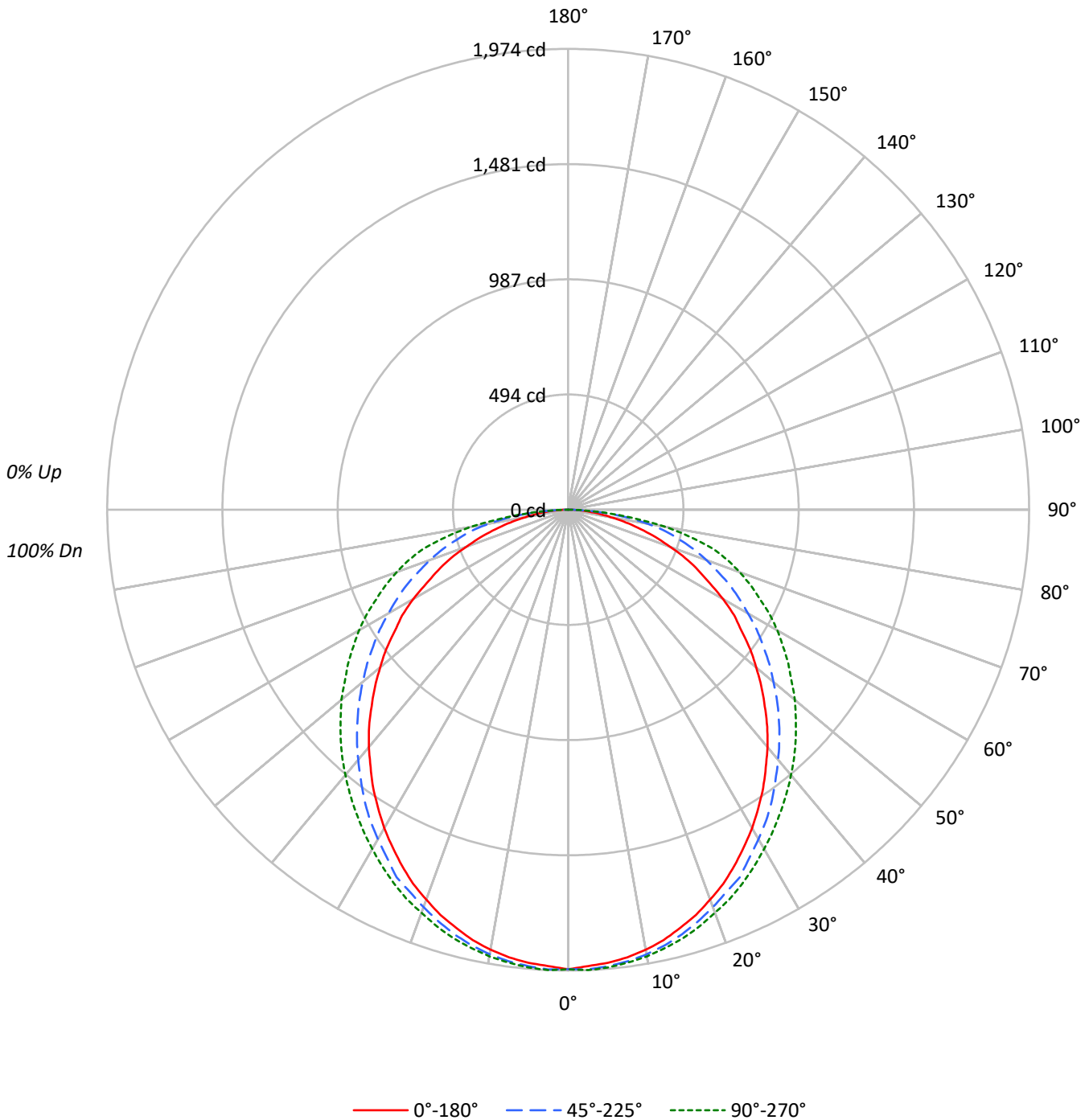
Input Watts (W): 50.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5296	5296	5296
5°	5263	5301	5317
10°	5230	5285	5308
15°	5166	5245	5293
20°	5090	5188	5261
25°	4998	5159	5244
30°	4894	5062	5213
35°	4781	4997	5203
40°	4663	4913	5213
45°	4531	4856	5246
50°	4400	4806	5306
55°	4250	4784	5399
60°	4124	4783	5564
65°	3917	4861	5768
70°	3653	4953	6140
75°	3347	5124	6633
80°	2913	5340	6533
85°	2550	4749	5190



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.1	3.2
10°-20°	530.2	9.2
20°-30°	795.9	13.7
30°-40°	951.0	16.4
40°-50°	988.9	17.1
50°-60°	916.6	15.8
60°-70°	751.8	13.0
70°-80°	508.2	8.8
80°-90°	159.7	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°	1512.2	26.1
0°-40°	2463.2	42.6
0°-60°	4368.7	75.5
0°-90°	5788.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5788.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1968	1968	1968	1968	1968	
5°	1948	1951	1962	1965	1968	185
15°	1854	1863	1883	1894	1900	523
25°	1683	1698	1738	1757	1766	775
35°	1456	1475	1521	1567	1584	910
45°	1191	1213	1276	1350	1379	919
55°	906	934	1020	1111	1151	814
65°	615	649	763	863	906	608
75°	322	376	493	592	638	341
85°	83	114	154	171	168	94
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1968.2	1968.2	1968.2	1968.2	1968.2
2.5°	1956.8	1962.5	1971.0	1973.9	1973.9
5°	1948.3	1951.1	1962.5	1965.3	1968.2
7.5°	1934.0	1939.7	1951.1	1954.0	1956.8
10°	1914.1	1919.8	1934.0	1939.7	1942.6
12.5°	1888.4	1894.1	1911.2	1919.8	1922.6
15°	1854.3	1862.8	1882.7	1894.1	1899.8
17.5°	1820.1	1828.6	1848.6	1865.7	1871.4
20°	1777.4	1797.3	1811.5	1834.3	1837.2
22.5°	1734.6	1746.0	1771.7	1794.4	1805.8
25°	1683.4	1697.6	1737.5	1757.4	1766.0
27.5°	1629.2	1649.2	1680.5	1711.8	1723.2
30°	1575.1	1589.4	1629.2	1666.3	1677.7
32.5°	1515.3	1535.3	1578.0	1615.0	1632.1
35°	1455.5	1475.4	1521.0	1566.6	1583.7
37.5°	1390.0	1412.8	1458.3	1512.5	1535.3
40°	1327.3	1344.4	1398.5	1464.0	1484.0
42.5°	1261.8	1281.7	1338.7	1409.9	1432.7
45°	1190.6	1213.4	1276.1	1350.1	1378.6
47.5°	1122.2	1145.0	1213.4	1287.4	1321.6
50°	1051.0	1079.5	1147.9	1233.3	1267.5
52.5°	982.7	1008.3	1085.2	1173.5	1204.8
55°	905.8	934.3	1019.7	1110.8	1150.7
57.5°	843.1	863.0	957.0	1051.0	1090.9
60°	766.2	791.8	888.7	988.4	1033.9
62.5°	683.6	726.3	826.0	928.6	974.1
65°	615.2	649.4	763.4	863.0	905.8
67.5°	544.0	581.1	692.1	797.5	846.0
70°	464.3	512.7	629.5	734.9	780.4
72.5°	393.1	444.3	564.0	666.5	714.9
75°	321.9	376.0	492.8	592.5	638.0
77.5°	253.5	313.3	427.2	504.2	532.6
80°	188.0	245.0	344.6	398.8	421.6
82.5°	131.0	179.4	253.5	282.0	287.7
85°	82.6	113.9	153.8	170.9	168.1
87.5°	37.0	45.6	57.0	62.7	59.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)