

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: P388445

Luminaire Tested: **22CZ2-70VHE-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: P388445
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-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

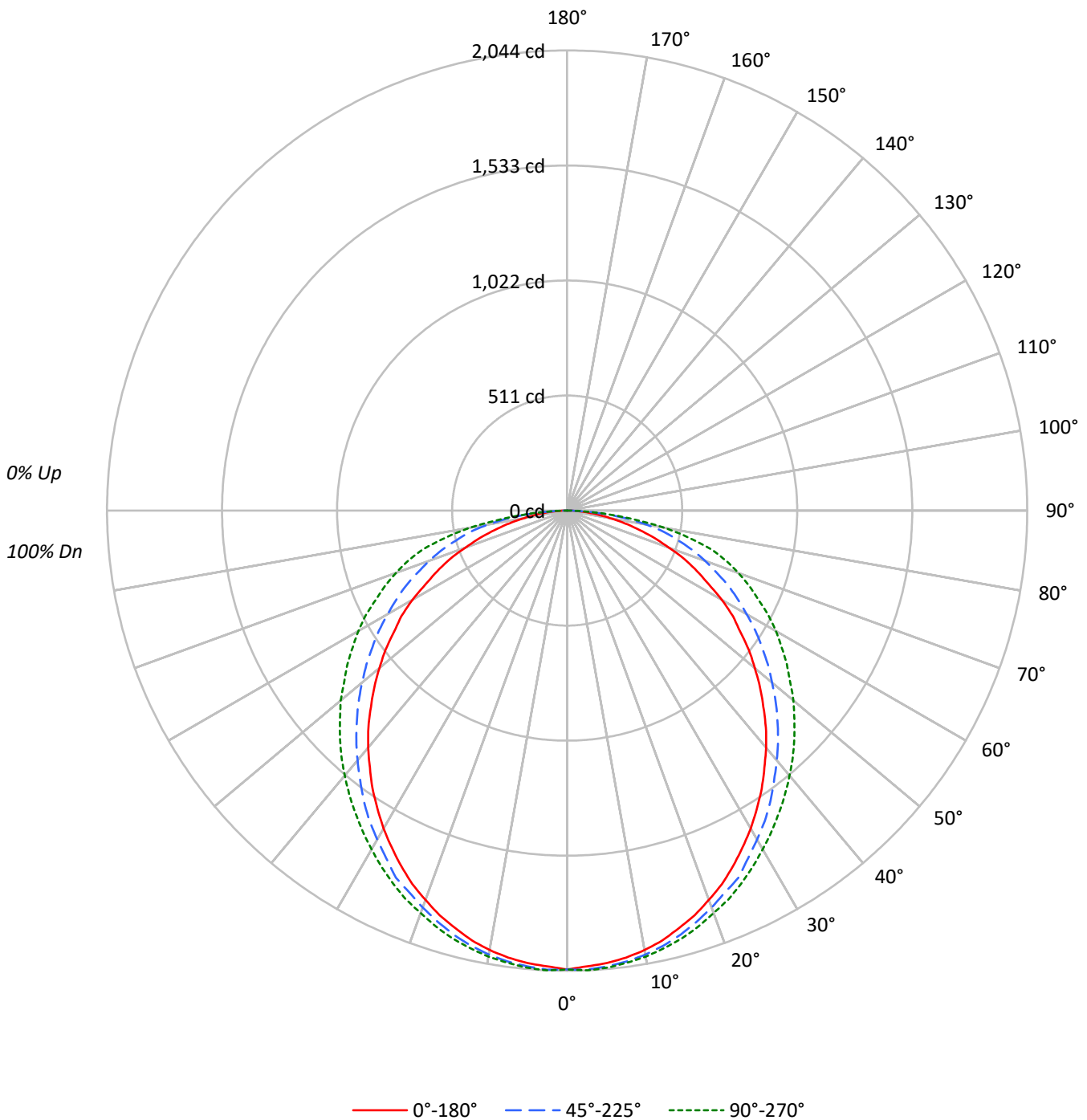
Lumens per Lamp: N/A
Luminaire Lumens: 5994.1 lumens
Efficiency: N/A
Efficacy: 119.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	5484	5484	5484
5°	5450	5489	5505
10°	5416	5472	5497
15°	5349	5431	5481
20°	5271	5372	5448
25°	5176	5342	5430
30°	5068	5242	5398
35°	4951	5174	5387
40°	4828	5087	5398
45°	4692	5029	5433
50°	4556	4976	5495
55°	4400	4954	5590
60°	4270	4952	5762
65°	4057	5033	5972
70°	3783	5128	6359
75°	3465	5306	6869
80°	3017	5531	6764
85°	2640	4918	5372



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.7	3.2
10°-20°	549.0	9.2
20°-30°	824.2	13.7
30°-40°	984.8	16.4
40°-50°	1024.1	17.1
50°-60°	949.1	15.8
60°-70°	778.5	13.0
70°-80°	526.3	8.8
80°-90°	165.4	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°	1565.9	26.1
0°-40°	2550.7	42.6
0°-60°	4523.9	75.5
0°-90°	5994.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5994.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2038	2038	2038	2038	2038	
5°	2018	2020	2032	2035	2038	191
15°	1920	1929	1950	1961	1967	542
25°	1743	1758	1799	1820	1829	803
35°	1507	1528	1575	1622	1640	942
45°	1233	1256	1321	1398	1428	952
55°	938	967	1056	1150	1192	843
65°	637	672	790	894	938	630
75°	333	389	510	614	661	353
85°	86	118	159	177	174	97
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2038.1	2038.1	2038.1	2038.1	2038.1
2.5°	2026.3	2032.2	2041.1	2044.0	2044.0
5°	2017.5	2020.4	2032.2	2035.2	2038.1
7.5°	2002.7	2008.6	2020.4	2023.4	2026.3
10°	1982.1	1988.0	2002.7	2008.6	2011.6
12.5°	1955.5	1961.4	1979.1	1988.0	1990.9
15°	1920.1	1929.0	1949.6	1961.4	1967.3
17.5°	1884.7	1893.6	1914.2	1931.9	1937.8
20°	1840.5	1861.1	1875.9	1899.5	1902.4
22.5°	1796.2	1808.0	1834.6	1858.2	1870.0
25°	1743.2	1757.9	1799.2	1819.8	1828.7
27.5°	1687.1	1707.8	1740.2	1772.6	1784.4
30°	1631.1	1645.8	1687.1	1725.5	1737.3
32.5°	1569.1	1589.8	1634.0	1672.4	1690.1
35°	1507.2	1527.8	1575.0	1622.2	1639.9
37.5°	1439.4	1463.0	1510.1	1566.2	1589.8
40°	1374.5	1392.2	1448.2	1516.0	1536.7
42.5°	1306.6	1327.3	1386.3	1460.0	1483.6
45°	1232.9	1256.5	1321.4	1398.1	1427.6
47.5°	1162.1	1185.7	1256.5	1333.2	1368.6
50°	1088.4	1117.9	1188.6	1277.1	1312.5
52.5°	1017.6	1044.1	1123.8	1215.2	1247.6
55°	937.9	967.4	1055.9	1150.3	1191.6
57.5°	873.1	893.7	991.0	1088.4	1129.7
60°	793.4	820.0	920.2	1023.5	1070.7
62.5°	707.9	752.1	855.4	961.5	1008.7
65°	637.1	672.5	790.5	893.7	937.9
67.5°	563.4	601.7	716.7	825.9	876.0
70°	480.8	530.9	651.8	761.0	808.2
72.5°	407.0	460.1	584.0	690.2	740.3
75°	333.3	389.3	510.3	613.5	660.7
77.5°	262.5	324.4	442.4	522.1	551.6
80°	194.7	253.7	356.9	412.9	436.5
82.5°	135.7	185.8	262.5	292.0	297.9
85°	85.5	118.0	159.3	177.0	174.0
87.5°	38.3	47.2	59.0	64.9	61.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)