

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: P388421

Luminaire Tested: **22CZ2-65VHE-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: P388421
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: 22CZ2-65VHE-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

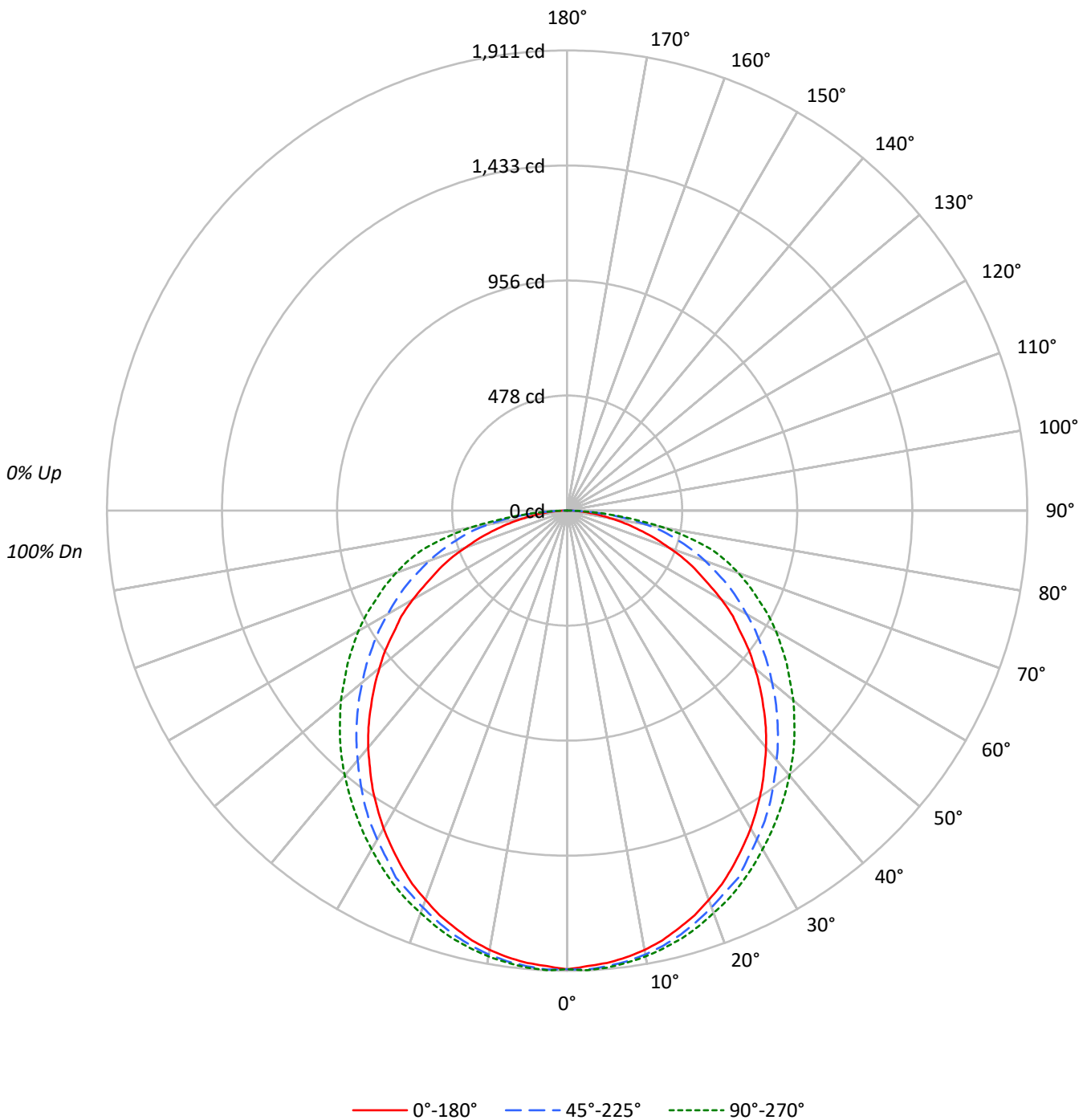
Lumens per Lamp: N/A
Luminaire Lumens: 5602.9 lumens
Efficiency: N/A
Efficacy: 117.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 47.9
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°	5127	5127	5127
5°	5094	5131	5146
10°	5062	5115	5138
15°	5000	5077	5123
20°	4927	5021	5092
25°	4838	4994	5075
30°	4737	4900	5046
35°	4628	4836	5036
40°	4513	4755	5046
45°	4386	4700	5078
50°	4259	4652	5136
55°	4113	4631	5225
60°	3991	4630	5386
65°	3792	4705	5582
70°	3536	4794	5943
75°	3239	4959	6421
80°	2820	5170	6323
85°	2470	4597	5023



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.2	3.2
10°-20°	513.2	9.2
20°-30°	770.4	13.7
30°-40°	920.5	16.4
40°-50°	957.2	17.1
50°-60°	887.2	15.8
60°-70°	727.7	13.0
70°-80°	491.9	8.8
80°-90°	154.6	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°	1463.7	26.1
0°-40°	2384.3	42.6
0°-60°	4228.7	75.5
0°-90°	5602.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5602.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1905	1905	1905	1905	1905	
5°	1886	1888	1900	1902	1905	179
15°	1795	1803	1822	1833	1839	506
25°	1629	1643	1682	1701	1709	750
35°	1409	1428	1472	1516	1533	881
45°	1152	1174	1235	1307	1334	890
55°	877	904	987	1075	1114	788
65°	596	629	739	835	877	589
75°	312	364	477	574	618	330
85°	80	110	149	165	163	91
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1905.1	1905.1	1905.1	1905.1	1905.1
2.5°	1894.1	1899.6	1907.8	1910.6	1910.6
5°	1885.8	1888.5	1899.6	1902.3	1905.1
7.5°	1872.0	1877.5	1888.5	1891.3	1894.1
10°	1852.7	1858.2	1872.0	1877.5	1880.3
12.5°	1827.9	1833.4	1849.9	1858.2	1861.0
15°	1794.8	1803.1	1822.4	1833.4	1838.9
17.5°	1761.7	1770.0	1789.3	1805.8	1811.4
20°	1720.4	1739.7	1753.5	1775.5	1778.3
22.5°	1679.0	1690.0	1714.9	1736.9	1747.9
25°	1629.4	1643.2	1681.8	1701.1	1709.3
27.5°	1577.0	1596.3	1626.6	1657.0	1668.0
30°	1524.6	1538.4	1577.0	1612.8	1623.9
32.5°	1466.7	1486.0	1527.4	1563.2	1579.8
35°	1408.8	1428.1	1472.2	1516.4	1532.9
37.5°	1345.4	1367.5	1411.6	1464.0	1486.0
40°	1284.8	1301.3	1353.7	1417.1	1436.4
42.5°	1221.4	1240.7	1295.8	1364.7	1386.8
45°	1152.4	1174.5	1235.1	1306.8	1334.4
47.5°	1086.3	1108.3	1174.5	1246.2	1279.2
50°	1017.3	1044.9	1111.1	1193.8	1226.9
52.5°	951.2	976.0	1050.4	1135.9	1166.2
55°	876.7	904.3	987.0	1075.2	1113.8
57.5°	816.1	835.4	926.4	1017.3	1055.9
60°	741.6	766.4	860.2	956.7	1000.8
62.5°	661.7	703.0	799.5	898.8	942.9
65°	595.5	628.6	738.9	835.4	876.7
67.5°	526.6	562.4	670.0	772.0	818.8
70°	449.4	496.3	609.3	711.3	755.4
72.5°	380.5	430.1	545.9	645.1	692.0
75°	311.5	363.9	477.0	573.5	617.6
77.5°	245.4	303.3	413.6	488.0	515.6
80°	182.0	237.1	333.6	386.0	408.0
82.5°	126.8	173.7	245.4	272.9	278.5
85°	80.0	110.3	148.9	165.4	162.7
87.5°	35.8	44.1	55.1	60.7	57.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)