

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: P390027

Luminaire Tested: **22CZ2-100VHE-HRP-UNV-L940-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: P390027
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-100VHE-HRP-UNV-L940-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7151.0 lumens
Efficiency: N/A
Efficacy: 92.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

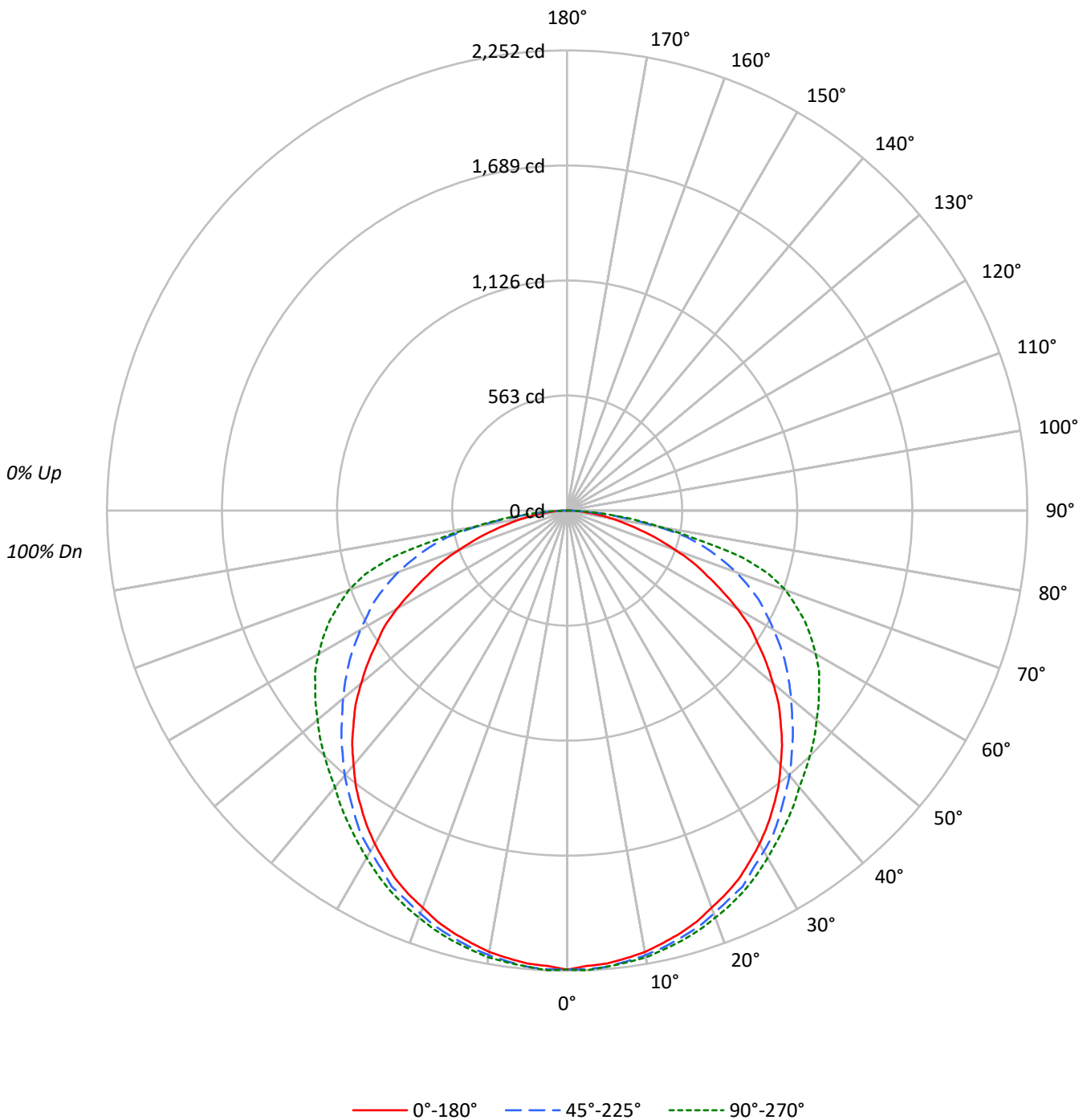
Input Watts (W): 77.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6045	6045	6045
5°	6011	6054	6054
10°	5994	6037	6066
15°	5965	6023	6067
20°	5920	6011	6071
25°	5904	6029	6092
30°	5852	5983	6097
35°	5789	5962	6135
40°	5710	5950	6209
45°	5625	5946	6406
50°	5506	5990	6673
55°	5355	6121	7058
60°	5181	6285	7559
65°	4823	6599	8173
70°	4429	6912	8940
75°	3883	7275	9243
80°	3343	6929	7256
85°	2924	5036	5524



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.5	3.0
10°-20°	610.1	8.5
20°-30°	930.8	13.0
30°-40°	1136.5	15.9
40°-50°	1215.2	17.0
50°-60°	1172.9	16.4
60°-70°	1009.7	14.1
70°-80°	683.1	9.6
80°-90°	180.2	2.5
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°	1753.3	24.5
0°-40°	2889.8	40.4
0°-60°	5277.9	73.8
0°-90°	7151.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7151.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2246	2246	2246	2246	2246	
5°	2225	2230	2241	2241	2241	211
15°	2141	2146	2162	2173	2178	604
25°	1988	1999	2031	2041	2052	915
35°	1762	1778	1815	1852	1868	1103
45°	1478	1504	1562	1641	1683	1141
55°	1142	1178	1305	1436	1504	1023
65°	758	831	1036	1199	1284	753
75°	374	494	700	842	889	401
85°	95	132	163	168	179	107
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2246.3	2246.3	2246.3	2246.3	2246.3
2.5°	2230.5	2235.7	2246.3	2246.3	2251.5
5°	2225.2	2230.5	2241.0	2241.0	2241.0
7.5°	2209.4	2214.7	2225.2	2230.5	2230.5
10°	2193.6	2198.9	2209.4	2214.7	2220.0
12.5°	2167.3	2172.6	2188.4	2198.9	2198.9
15°	2141.0	2146.3	2162.1	2172.6	2177.9
17.5°	2109.5	2120.0	2135.8	2146.3	2151.6
20°	2067.4	2077.9	2099.0	2114.7	2120.0
22.5°	2030.6	2041.1	2062.1	2077.9	2088.4
25°	1988.5	1999.0	2030.6	2041.1	2051.6
27.5°	1935.9	1946.4	1972.7	1993.7	2009.5
30°	1883.3	1893.8	1925.4	1951.7	1962.2
32.5°	1825.4	1841.2	1878.0	1899.1	1914.8
35°	1762.3	1778.1	1814.9	1851.7	1867.5
37.5°	1699.2	1714.9	1751.8	1799.1	1820.1
40°	1625.5	1646.6	1693.9	1757.0	1767.5
42.5°	1557.1	1583.4	1625.5	1699.2	1725.5
45°	1478.2	1504.5	1562.4	1641.3	1683.4
47.5°	1404.6	1430.9	1494.0	1588.7	1641.3
50°	1315.1	1352.0	1430.9	1541.3	1593.9
52.5°	1231.0	1262.5	1367.7	1488.7	1551.9
55°	1141.5	1178.4	1304.6	1436.1	1504.5
57.5°	1062.6	1094.2	1236.2	1383.5	1462.4
60°	962.7	1004.8	1167.8	1325.7	1404.6
62.5°	857.5	920.6	1099.5	1262.5	1346.7
65°	757.5	831.2	1036.3	1199.4	1283.6
67.5°	668.1	747.0	957.4	1131.0	1209.9
70°	562.9	662.8	878.5	1046.8	1136.3
72.5°	468.2	578.7	789.1	957.4	1036.3
75°	373.5	494.5	699.7	841.7	889.0
77.5°	289.3	405.1	599.7	641.8	647.0
80°	215.7	320.9	447.1	452.4	468.2
82.5°	147.3	226.2	289.3	315.6	320.9
85°	94.7	131.5	163.1	168.3	178.9
87.5°	42.1	47.3	57.9	52.6	52.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)