

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: P390746

Luminaire Tested: **22CZ2-85VHE-HRP-UNV-L935-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: P390746
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: 22CZ2-85VHE-HRP-UNV-L935-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6182.7 lumens
Efficiency: N/A
Efficacy: 97.2 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

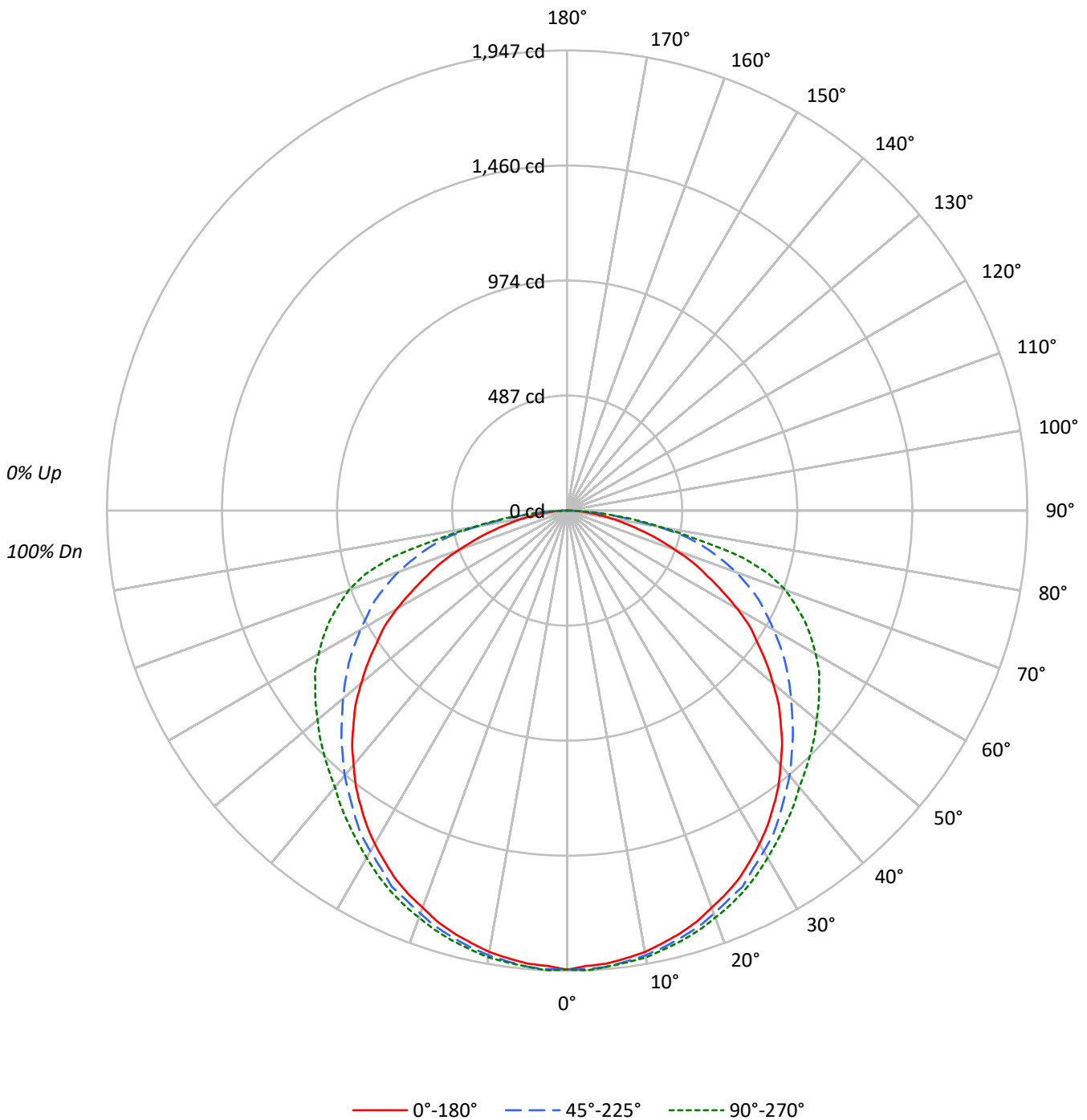
Input Watts (W): 63.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5226	5226	5226
5°	5197	5234	5234
10°	5182	5220	5245
15°	5157	5208	5246
20°	5119	5197	5249
25°	5105	5213	5267
30°	5060	5173	5271
35°	5005	5155	5304
40°	4937	5145	5368
45°	4864	5141	5539
50°	4760	5179	5769
55°	4631	5292	6103
60°	4479	5434	6536
65°	4170	5705	7067
70°	3829	5976	7729
75°	3357	6289	7992
80°	2890	5991	6273
85°	2529	4353	4773



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.7	3.0
10°-20°	527.5	8.5
20°-30°	804.7	13.0
30°-40°	982.6	15.9
40°-50°	1050.6	17.0
50°-60°	1014.1	16.4
60°-70°	873.0	14.1
70°-80°	590.6	9.6
80°-90°	155.8	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°	1515.9	24.5
0°-40°	2498.5	40.4
0°-60°	4563.3	73.8
0°-90°	6182.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6182.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1942	1942	1942	1942	1942	
5°	1924	1928	1938	1938	1938	183
15°	1851	1856	1869	1878	1883	522
25°	1719	1728	1756	1765	1774	791
35°	1524	1537	1569	1601	1615	953
45°	1278	1301	1351	1419	1455	987
55°	987	1019	1128	1242	1301	884
65°	655	719	896	1037	1110	651
75°	323	428	605	728	769	346
85°	82	114	141	146	155	92
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1942.1	1942.1	1942.1	1942.1	1942.1
2.5°	1928.4	1933.0	1942.1	1942.1	1946.6
5°	1923.9	1928.4	1937.5	1937.5	1937.5
7.5°	1910.3	1914.8	1923.9	1928.4	1928.4
10°	1896.6	1901.2	1910.3	1914.8	1919.4
12.5°	1873.9	1878.4	1892.1	1901.2	1901.2
15°	1851.1	1855.7	1869.3	1878.4	1883.0
17.5°	1823.8	1832.9	1846.6	1855.7	1860.2
20°	1787.5	1796.6	1814.7	1828.4	1832.9
22.5°	1755.6	1764.7	1782.9	1796.6	1805.6
25°	1719.2	1728.3	1755.6	1764.7	1773.8
27.5°	1673.7	1682.8	1705.6	1723.8	1737.4
30°	1628.3	1637.4	1664.7	1687.4	1696.5
32.5°	1578.2	1591.9	1623.7	1641.9	1655.6
35°	1523.7	1537.3	1569.1	1601.0	1614.6
37.5°	1469.1	1482.7	1514.6	1555.5	1573.7
40°	1405.4	1423.6	1464.5	1519.1	1528.2
42.5°	1346.3	1369.0	1405.4	1469.1	1491.8
45°	1278.1	1300.8	1350.8	1419.0	1455.4
47.5°	1214.4	1237.1	1291.7	1373.6	1419.0
50°	1137.1	1168.9	1237.1	1332.6	1378.1
52.5°	1064.3	1091.6	1182.5	1287.1	1341.7
55°	987.0	1018.8	1128.0	1241.7	1300.8
57.5°	918.7	946.0	1068.8	1196.2	1264.4
60°	832.3	868.7	1009.7	1146.2	1214.4
62.5°	741.4	795.9	950.6	1091.6	1164.3
65°	654.9	718.6	896.0	1037.0	1109.8
67.5°	577.6	645.8	827.8	977.9	1046.1
70°	486.7	573.1	759.6	905.1	982.4
72.5°	404.8	500.3	682.2	827.8	896.0
75°	322.9	427.5	604.9	727.7	768.7
77.5°	250.2	350.2	518.5	554.9	559.4
80°	186.5	277.4	386.6	391.1	404.8
82.5°	127.4	195.6	250.2	272.9	277.4
85°	81.9	113.7	141.0	145.5	154.6
87.5°	36.4	40.9	50.0	45.5	45.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)