

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: P390848

Luminaire Tested: **22CZ2-95VHE-HRP-UNV-L950-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: P390848
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: 22CZ2-95VHE-HRP-UNV-L950-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7396.2 lumens
Efficiency: N/A
Efficacy: 101.7 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

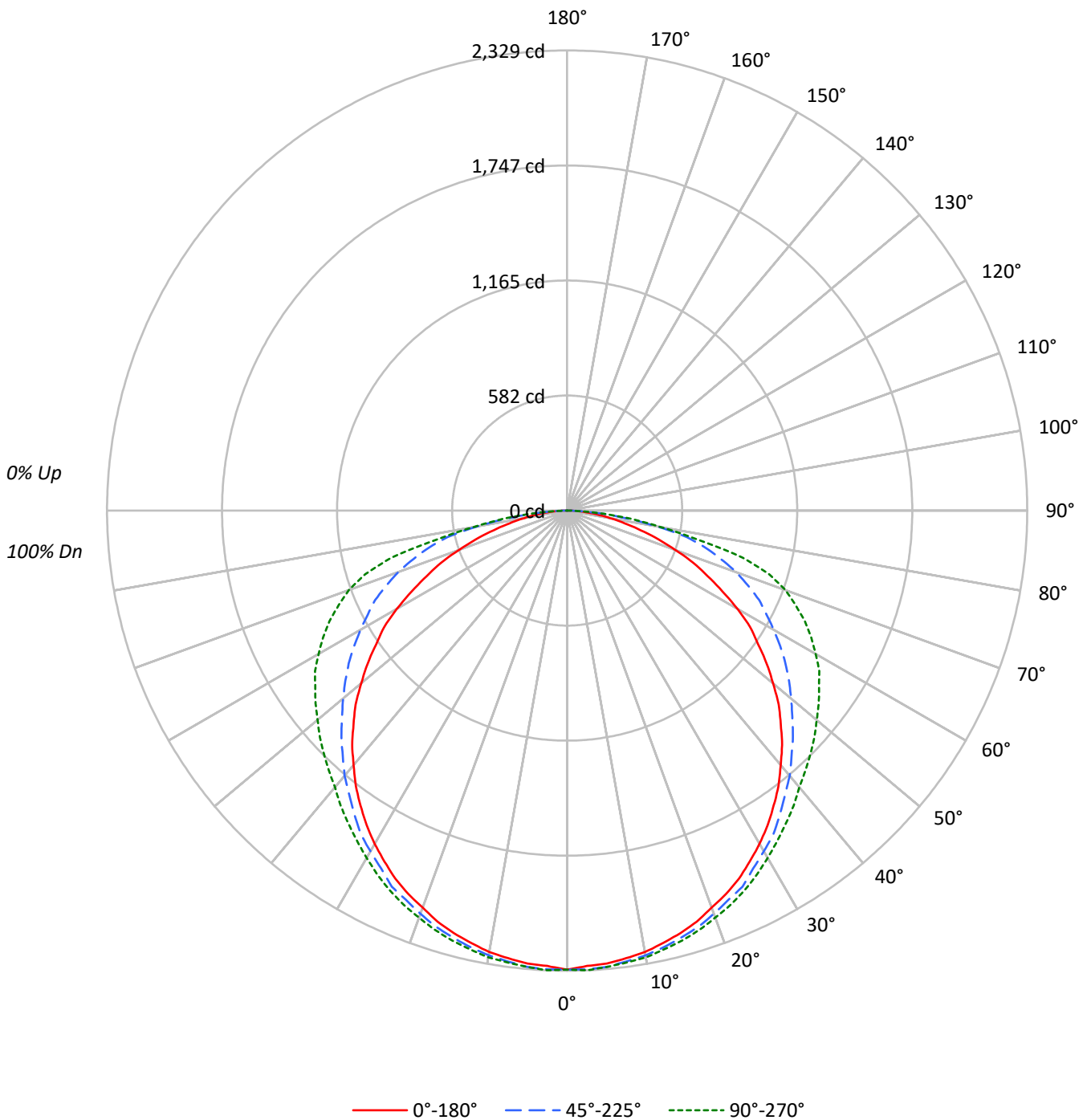
Input Watts (W): 72.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82					82			
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67					67			
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55					55			
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47					47			
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40					40			
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35					35			
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31					31			
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27					27			
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24					24			
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22					22			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6252	6252	6252
5°	6217	6261	6261
10°	6200	6244	6274
15°	6169	6230	6275
20°	6123	6217	6279
25°	6107	6236	6301
30°	6053	6188	6306
35°	5988	6166	6345
40°	5906	6154	6422
45°	5818	6150	6626
50°	5694	6195	6902
55°	5539	6330	7301
60°	5359	6501	7818
65°	4989	6825	8453
70°	4581	7149	9246
75°	4016	7523	9560
80°	3457	7167	7504
85°	3023	5209	5712



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	219.8	3.0
10°-20°	631.0	8.5
20°-30°	962.7	13.0
30°-40°	1175.5	15.9
40°-50°	1256.8	17.0
50°-60°	1213.1	16.4
60°-70°	1044.3	14.1
70°-80°	706.5	9.6
80°-90°	186.4	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°	1813.5	24.5
0°-40°	2988.9	40.4
0°-60°	5458.9	73.8
0°-90°	7396.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7396.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2323	2323	2323	2323	2323	
5°	2302	2307	2318	2318	2318	219
15°	2214	2220	2236	2247	2252	625
25°	2057	2068	2100	2111	2122	947
35°	1823	1839	1877	1915	1932	1141
45°	1529	1556	1616	1698	1741	1180
55°	1181	1219	1349	1485	1556	1058
65°	784	860	1072	1240	1328	779
75°	386	511	724	870	920	414
85°	98	136	169	174	185	110
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2323.3	2323.3	2323.3	2323.3	2323.3
2.5°	2307.0	2312.4	2323.3	2323.3	2328.7
5°	2301.5	2307.0	2317.8	2317.8	2317.8
7.5°	2285.2	2290.6	2301.5	2307.0	2307.0
10°	2268.9	2274.3	2285.2	2290.6	2296.1
12.5°	2241.7	2247.1	2263.4	2274.3	2274.3
15°	2214.5	2219.9	2236.2	2247.1	2252.5
17.5°	2181.8	2192.7	2209.0	2219.9	2225.3
20°	2138.3	2149.2	2170.9	2187.3	2192.7
22.5°	2100.2	2111.1	2132.8	2149.2	2160.0
25°	2056.7	2067.6	2100.2	2111.1	2122.0
27.5°	2002.3	2013.1	2040.3	2062.1	2078.4
30°	1947.9	1958.7	1991.4	2018.6	2029.5
32.5°	1888.0	1904.3	1942.4	1964.2	1980.5
35°	1822.7	1839.0	1877.1	1915.2	1931.5
37.5°	1757.4	1773.7	1811.8	1860.8	1882.6
40°	1681.2	1703.0	1752.0	1817.3	1828.2
42.5°	1610.5	1637.7	1681.2	1757.4	1784.6
45°	1528.9	1556.1	1616.0	1697.6	1741.1
47.5°	1452.7	1479.9	1545.2	1643.2	1697.6
50°	1360.2	1398.3	1479.9	1594.2	1648.6
52.5°	1273.2	1305.8	1414.6	1539.8	1605.1
55°	1180.7	1218.8	1349.3	1485.4	1556.1
57.5°	1099.1	1131.7	1278.6	1431.0	1512.6
60°	995.7	1039.2	1207.9	1371.1	1452.7
62.5°	886.9	952.2	1137.2	1305.8	1392.9
65°	783.5	859.7	1071.9	1240.5	1327.6
67.5°	691.0	772.6	990.2	1169.8	1251.4
70°	582.2	685.6	908.6	1082.7	1175.2
72.5°	484.2	598.5	816.1	990.2	1071.9
75°	386.3	511.4	723.6	870.5	919.5
77.5°	299.3	419.0	620.3	663.8	669.2
80°	223.1	331.9	462.5	467.9	484.2
82.5°	152.3	234.0	299.3	326.5	331.9
85°	97.9	136.0	168.7	174.1	185.0
87.5°	43.5	49.0	59.9	54.4	54.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)