

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: P388494

Luminaire Tested: **22CZ2-80VHE-UNV-L950-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: P388494
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: 22CZ2-80VHE-UNV-L950-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7158.6 lumens
Efficiency: N/A
Efficacy: 121.1 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

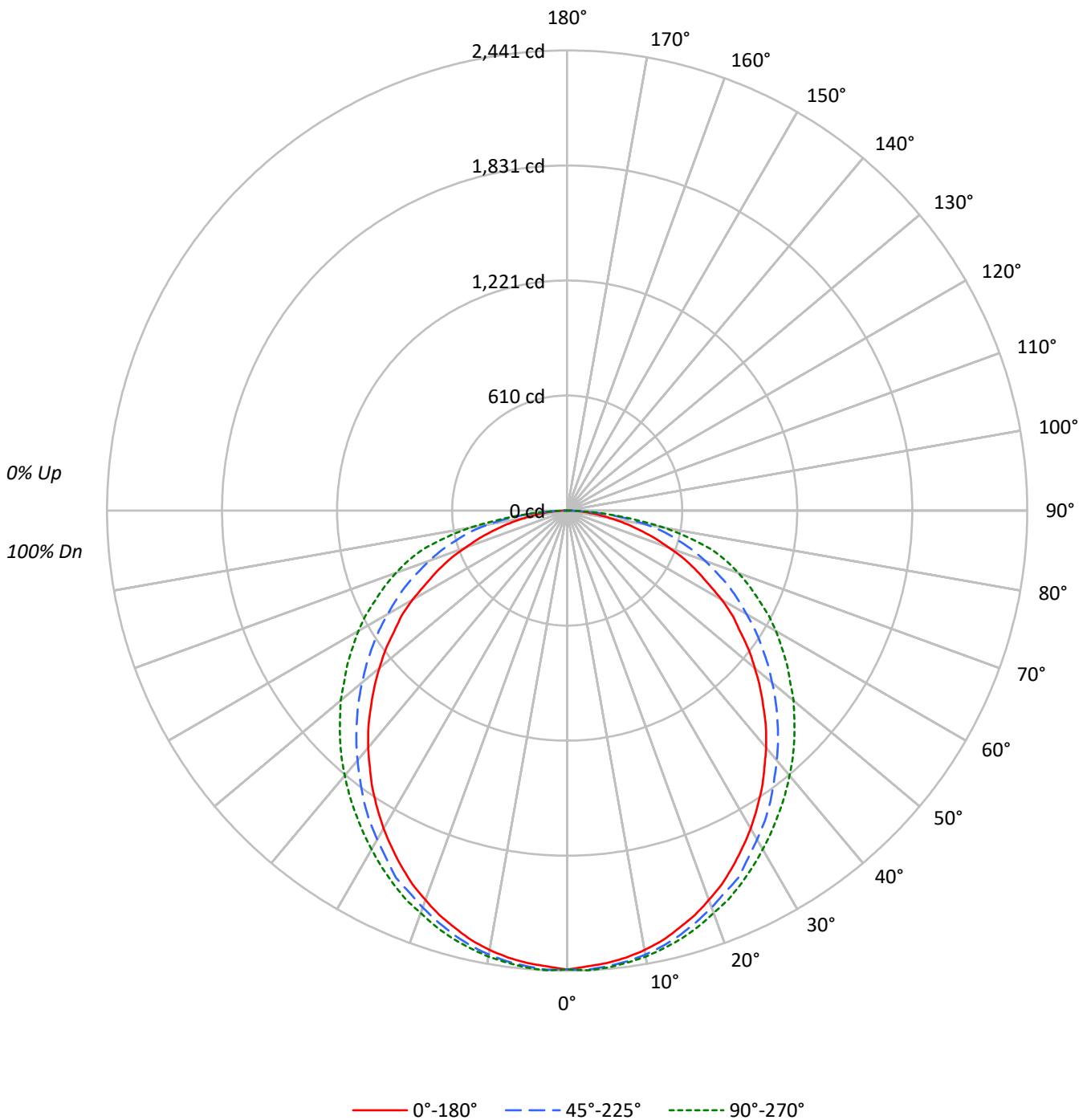
Input Watts (W): 59.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6550	6550	6550
5°	6508	6556	6575
10°	6468	6536	6565
15°	6389	6487	6545
20°	6294	6416	6506
25°	6181	6380	6485
30°	6053	6261	6447
35°	5913	6179	6434
40°	5766	6076	6447
45°	5603	6006	6488
50°	5442	5943	6562
55°	5256	5917	6677
60°	5100	5915	6882
65°	4845	6011	7133
70°	4518	6125	7594
75°	4138	6336	8203
80°	3603	6605	8078
85°	3155	5873	6416



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	230.2	3.2
10°-20°	655.7	9.2
20°-30°	984.3	13.7
30°-40°	1176.1	16.4
40°-50°	1223.0	17.1
50°-60°	1133.5	15.8
60°-70°	929.8	13.0
70°-80°	628.5	8.8
80°-90°	197.5	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°	1870.1	26.1
0°-40°	3046.3	42.6
0°-60°	5402.8	75.5
0°-90°	7158.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7158.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2434	2434	2434	2434	2434	
5°	2409	2413	2427	2430	2434	229
15°	2293	2304	2328	2342	2350	647
25°	2082	2099	2149	2173	2184	959
35°	1800	1825	1881	1937	1958	1125
45°	1472	1501	1578	1670	1705	1137
55°	1120	1155	1261	1374	1423	1007
65°	761	803	944	1067	1120	752
75°	398	465	609	733	789	422
85°	102	141	190	211	208	116
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2434.1	2434.1	2434.1	2434.1	2434.1
2.5°	2420.0	2427.0	2437.6	2441.1	2441.1
5°	2409.4	2412.9	2427.0	2430.5	2434.1
7.5°	2391.8	2398.8	2412.9	2416.4	2420.0
10°	2367.1	2374.2	2391.8	2398.8	2402.4
12.5°	2335.4	2342.5	2363.6	2374.2	2377.7
15°	2293.2	2303.7	2328.4	2342.5	2349.5
17.5°	2250.9	2261.5	2286.1	2307.2	2314.3
20°	2198.0	2222.7	2240.3	2268.5	2272.0
22.5°	2145.2	2159.3	2191.0	2219.2	2233.3
25°	2081.8	2099.4	2148.7	2173.4	2184.0
27.5°	2014.9	2039.5	2078.3	2117.0	2131.1
30°	1947.9	1965.6	2014.9	2060.7	2074.8
32.5°	1874.0	1898.6	1951.5	1997.3	2018.4
35°	1800.0	1824.7	1881.0	1937.4	1958.5
37.5°	1719.0	1747.2	1803.5	1870.5	1898.6
40°	1641.5	1662.6	1729.6	1810.6	1835.2
42.5°	1560.5	1585.1	1655.6	1743.6	1771.8
45°	1472.4	1500.6	1578.1	1669.7	1704.9
47.5°	1387.9	1416.0	1500.6	1592.2	1634.4
50°	1299.8	1335.0	1419.6	1525.2	1567.5
52.5°	1215.3	1247.0	1342.1	1451.3	1490.0
55°	1120.2	1155.4	1261.1	1373.8	1423.1
57.5°	1042.7	1067.3	1183.6	1299.8	1349.1
60°	947.6	979.3	1099.0	1222.3	1278.7
62.5°	845.4	898.2	1021.5	1148.3	1204.7
65°	760.9	803.1	944.0	1067.3	1120.2
67.5°	672.8	718.6	856.0	986.3	1046.2
70°	574.2	634.1	778.5	908.8	965.2
72.5°	486.1	549.5	697.5	824.3	884.2
75°	398.0	465.0	609.4	732.7	789.0
77.5°	313.5	387.5	528.4	623.5	658.7
80°	232.5	302.9	426.2	493.2	521.3
82.5°	162.0	221.9	313.5	348.7	355.8
85°	102.2	140.9	190.2	211.4	207.8
87.5°	45.8	56.4	70.5	77.5	74.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)