

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: P388208

Luminaire Tested: **22CZ2-20VHE-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: P388208
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: 22CZ2-20VHE-UNV-L950-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

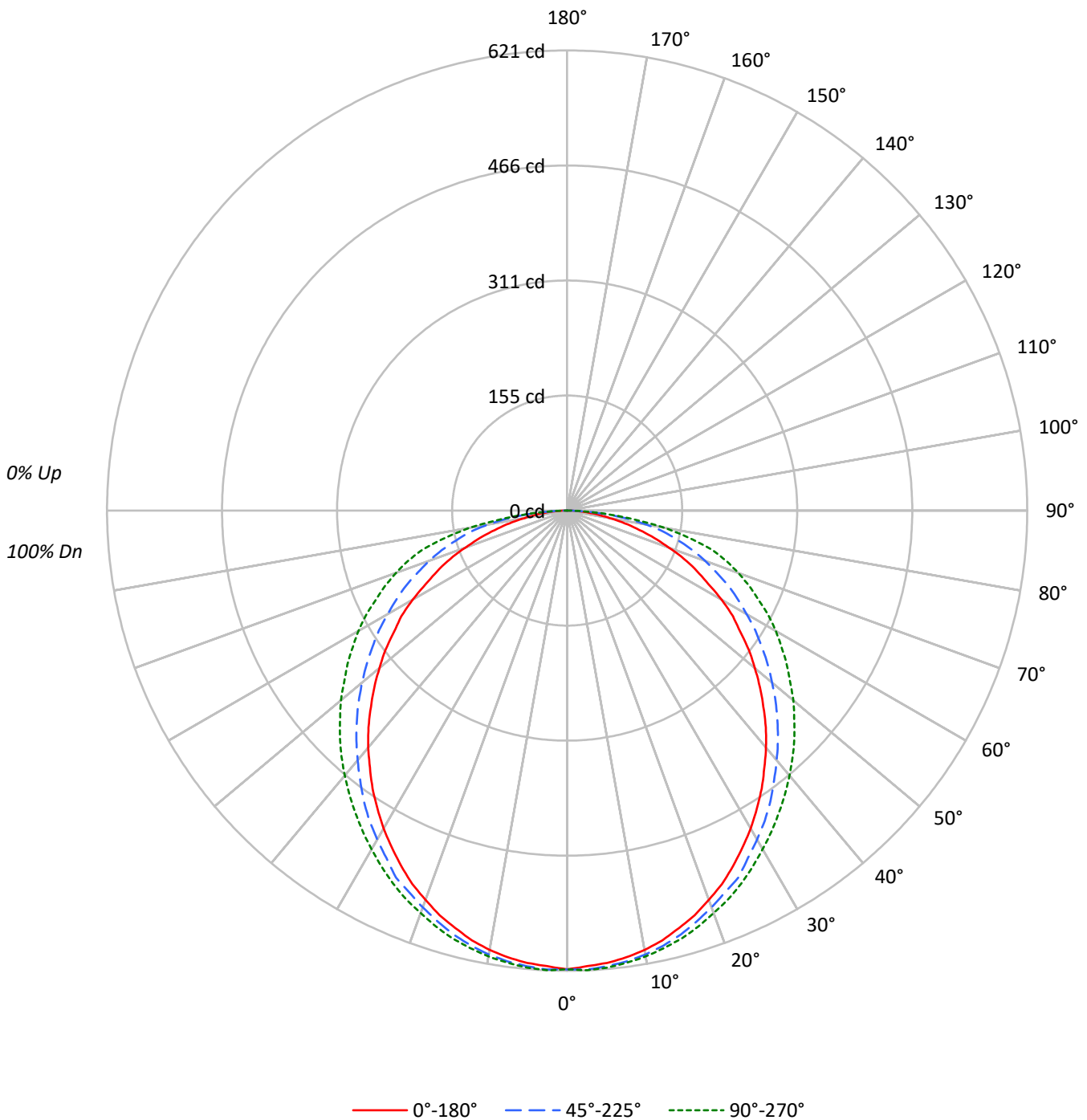
Lumens per Lamp: N/A
Luminaire Lumens: 1820.7 lumens
Efficiency: N/A
Efficacy: 128.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 14.2
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°	1666	1666	1666
5°	1655	1667	1672
10°	1645	1662	1670
15°	1625	1650	1665
20°	1601	1632	1655
25°	1572	1623	1649
30°	1539	1592	1640
35°	1504	1572	1636
40°	1467	1545	1640
45°	1425	1528	1650
50°	1384	1512	1669
55°	1337	1505	1698
60°	1297	1504	1750
65°	1232	1529	1814
70°	1149	1558	1932
75°	1052	1612	2087
80°	916	1680	2055
85°	803	1494	1633



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.5	3.2
10°-20°	166.8	9.2
20°-30°	250.3	13.7
30°-40°	299.1	16.4
40°-50°	311.1	17.1
50°-60°	288.3	15.8
60°-70°	236.5	13.0
70°-80°	159.9	8.8
80°-90°	50.2	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°	475.6	26.1
0°-40°	774.8	42.6
0°-60°	1374.1	75.5
0°-90°	1820.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1820.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	619	619	619	619	619	
5°	613	614	617	618	619	58
15°	583	586	592	596	598	165
25°	530	534	546	553	556	244
35°	458	464	478	493	498	286
45°	374	382	401	425	434	289
55°	285	294	321	349	362	256
65°	194	204	240	272	285	191
75°	101	118	155	186	201	107
85°	26	36	48	54	53	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	619.1	619.1	619.1	619.1	619.1
2.5°	615.5	617.3	620.0	620.9	620.9
5°	612.8	613.7	617.3	618.2	619.1
7.5°	608.3	610.1	613.7	614.6	615.5
10°	602.0	603.8	608.3	610.1	611.0
12.5°	594.0	595.8	601.2	603.8	604.7
15°	583.2	585.9	592.2	595.8	597.6
17.5°	572.5	575.2	581.4	586.8	588.6
20°	559.0	565.3	569.8	577.0	577.9
22.5°	545.6	549.2	557.3	564.4	568.0
25°	529.5	534.0	546.5	552.8	555.5
27.5°	512.5	518.7	528.6	538.4	542.0
30°	495.4	499.9	512.5	524.1	527.7
32.5°	476.6	482.9	496.3	508.0	513.4
35°	457.8	464.1	478.4	492.7	498.1
37.5°	437.2	444.4	458.7	475.7	482.9
40°	417.5	422.9	439.9	460.5	466.8
42.5°	396.9	403.2	421.1	443.5	450.6
45°	374.5	381.7	401.4	424.7	433.6
47.5°	353.0	360.2	381.7	404.9	415.7
50°	330.6	339.5	361.1	387.9	398.7
52.5°	309.1	317.2	341.3	369.1	379.0
55°	284.9	293.9	320.7	349.4	361.9
57.5°	265.2	271.5	301.0	330.6	343.1
60°	241.0	249.1	279.5	310.9	325.2
62.5°	215.0	228.5	259.8	292.1	306.4
65°	193.5	204.3	240.1	271.5	284.9
67.5°	171.1	182.8	217.7	250.9	266.1
70°	146.0	161.3	198.0	231.1	245.5
72.5°	123.6	139.8	177.4	209.6	224.9
75°	101.2	118.3	155.0	186.3	200.7
77.5°	79.7	98.5	134.4	158.6	167.5
80°	59.1	77.0	108.4	125.4	132.6
82.5°	41.2	56.4	79.7	88.7	90.5
85°	26.0	35.8	48.4	53.8	52.9
87.5°	11.6	14.3	17.9	19.7	18.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)