

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: P388207

Luminaire Tested: **22CZ2-20VHE-UNV-L950-CD1-SWPD1-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: P388207
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-SWPD1-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: 1798.1 lumens
Efficiency: N/A
Efficacy: 126.6 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

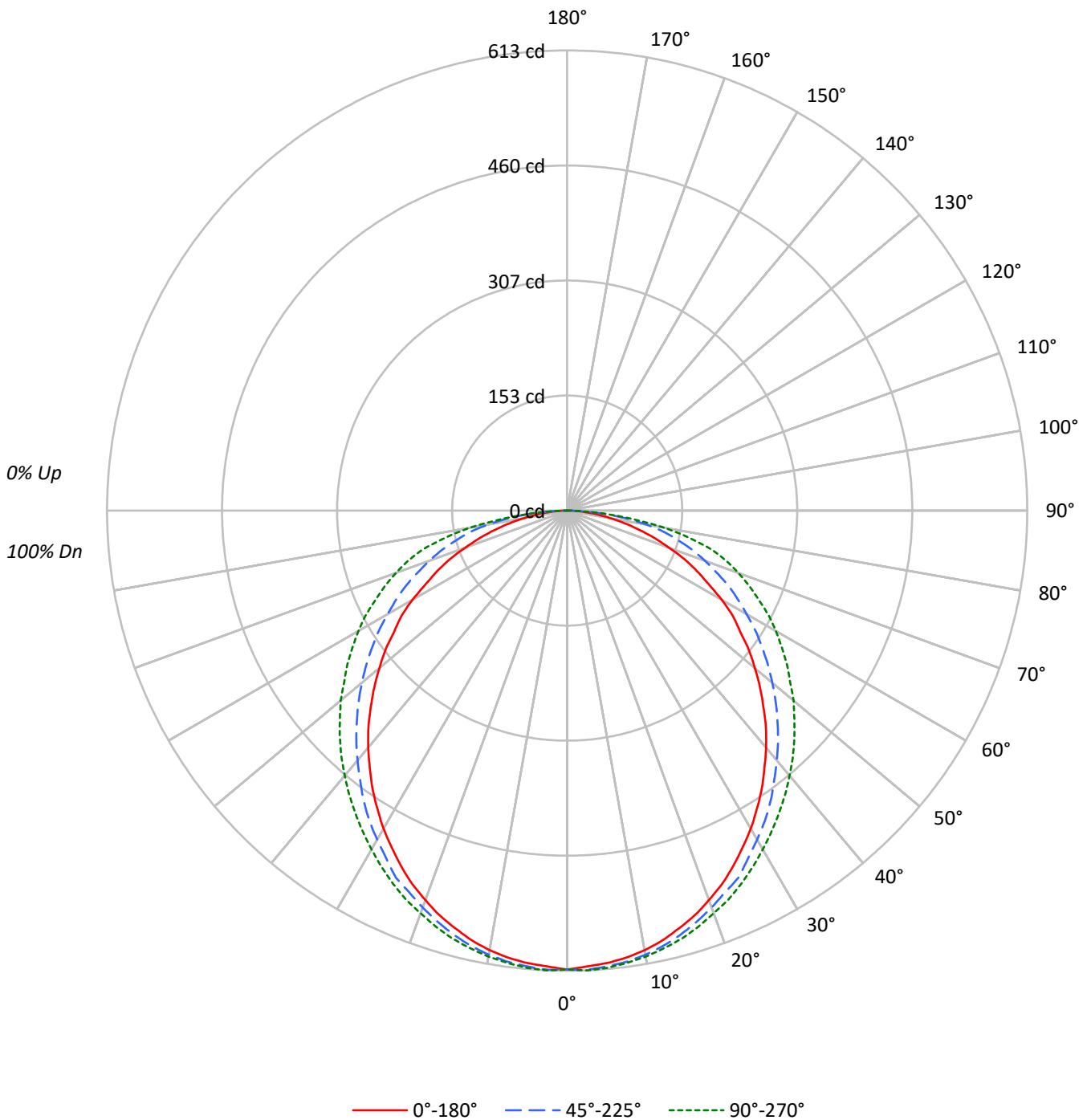
Input Watts (W): 14.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1645	1645	1645
5°	1635	1647	1652
10°	1625	1642	1649
15°	1605	1629	1644
20°	1581	1611	1634
25°	1553	1602	1629
30°	1520	1573	1619
35°	1485	1552	1616
40°	1448	1526	1619
45°	1407	1509	1630
50°	1367	1493	1648
55°	1320	1486	1677
60°	1281	1486	1729
65°	1217	1510	1792
70°	1135	1538	1907
75°	1040	1592	2061
80°	905	1660	2029
85°	794	1476	1612



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.8	3.2
10°-20°	164.7	9.2
20°-30°	247.2	13.7
30°-40°	295.4	16.4
40°-50°	307.2	17.1
50°-60°	284.7	15.8
60°-70°	233.5	13.0
70°-80°	157.9	8.8
80°-90°	49.6	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°	469.7	26.1
0°-40°	765.2	42.6
0°-60°	1357.1	75.5
0°-90°	1798.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1798.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	611	611	611	611	611	
5°	605	606	610	610	611	57
15°	576	579	585	588	590	162
25°	523	527	540	546	549	241
35°	452	458	472	487	492	283
45°	370	377	396	419	428	286
55°	281	290	317	345	358	253
65°	191	202	237	268	281	189
75°	100	117	153	184	198	106
85°	26	35	48	53	52	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	611.4	611.4	611.4	611.4	611.4
2.5°	607.8	609.6	612.3	613.2	613.2
5°	605.2	606.1	609.6	610.5	611.4
7.5°	600.8	602.5	606.1	607.0	607.8
10°	594.6	596.3	600.8	602.5	603.4
12.5°	586.6	588.4	593.7	596.3	597.2
15°	576.0	578.7	584.8	588.4	590.2
17.5°	565.4	568.0	574.2	579.5	581.3
20°	552.1	558.3	562.7	569.8	570.7
22.5°	538.8	542.4	550.3	557.4	561.0
25°	522.9	527.3	539.7	545.9	548.6
27.5°	506.1	512.3	522.0	531.8	535.3
30°	489.3	493.7	506.1	517.6	521.1
32.5°	470.7	476.9	490.2	501.7	507.0
35°	452.1	458.3	472.5	486.6	491.9
37.5°	431.8	438.9	453.0	469.8	476.9
40°	412.3	417.6	434.4	454.8	461.0
42.5°	392.0	398.2	415.8	438.0	445.0
45°	369.8	376.9	396.4	419.4	428.2
47.5°	348.6	355.7	376.9	399.9	410.5
50°	326.5	335.3	356.6	383.1	393.7
52.5°	305.3	313.2	337.1	364.5	374.3
55°	281.4	290.2	316.8	345.1	357.5
57.5°	261.9	268.1	297.3	326.5	338.9
60°	238.0	246.0	276.1	307.0	321.2
62.5°	212.3	225.6	256.6	288.4	302.6
65°	191.1	201.7	237.1	268.1	281.4
67.5°	169.0	180.5	215.0	247.7	262.8
70°	144.2	159.3	195.5	228.3	242.4
72.5°	122.1	138.0	175.2	207.0	222.1
75°	100.0	116.8	153.1	184.0	198.2
77.5°	78.7	97.3	132.7	156.6	165.5
80°	58.4	76.1	107.1	123.9	130.9
82.5°	40.7	55.7	78.7	87.6	89.4
85°	25.7	35.4	47.8	53.1	52.2
87.5°	11.5	14.2	17.7	19.5	18.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)