

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: P389136

Luminaire Tested: **22CZ2-20VHE-S-UNV-L935-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: P389136
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-20VHE-S-UNV-L935-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1740.5 lumens
Efficiency: N/A
Efficacy: 122.6 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

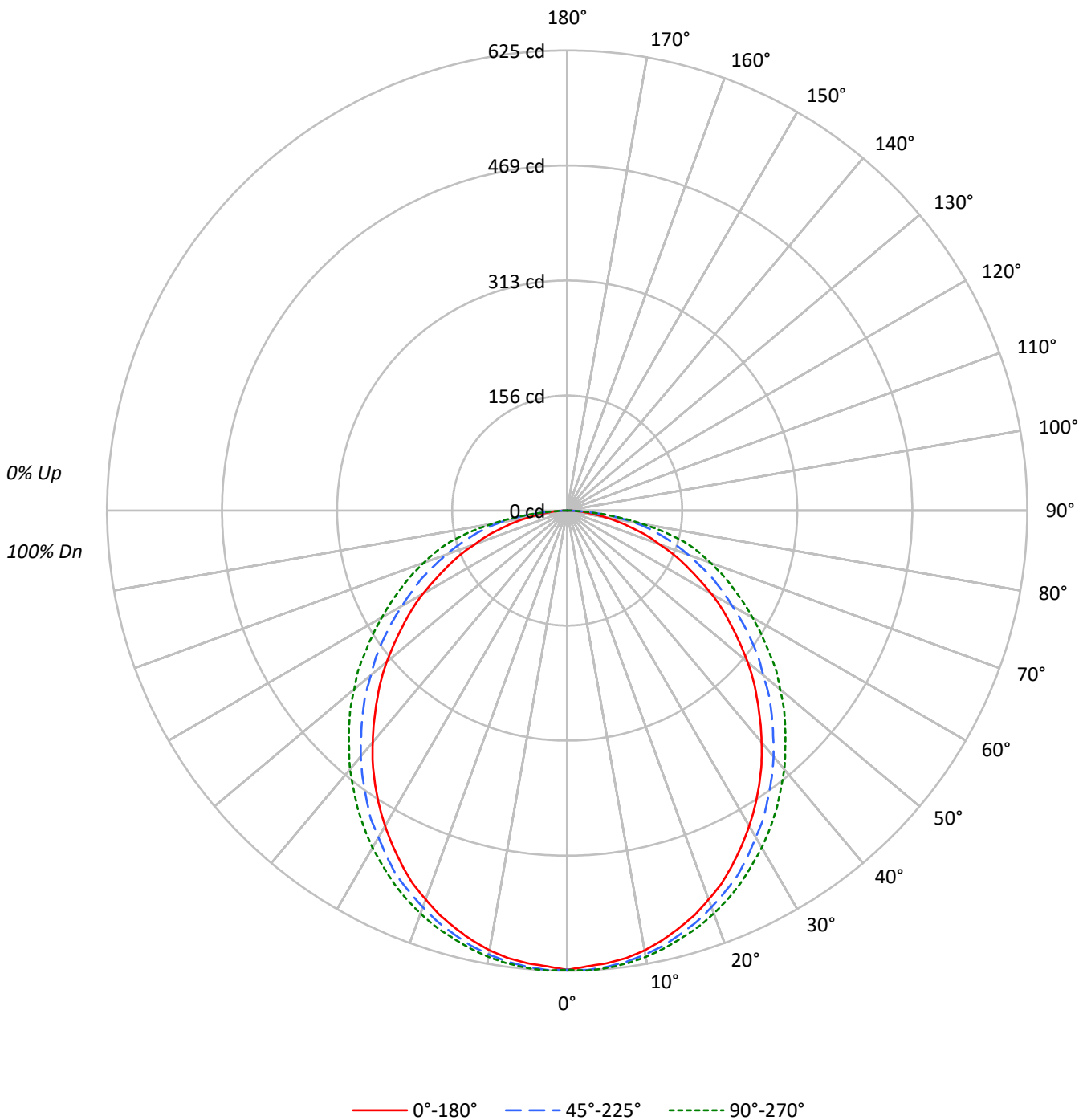
Input Watts (W): 14.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49					49			
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27					27			
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1678	1678	1678
5°	1667	1680	1685
10°	1658	1673	1682
15°	1636	1658	1674
20°	1609	1642	1668
25°	1577	1625	1656
30°	1537	1592	1643
35°	1494	1563	1627
40°	1443	1532	1612
45°	1391	1496	1595
50°	1340	1455	1581
55°	1276	1429	1570
60°	1220	1394	1565
65°	1138	1386	1582
70°	1048	1374	1629
75°	946	1393	1714
80°	818	1435	1610
85°	676	1204	1204



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.0	3.4
10°-20°	167.8	9.6
20°-30°	251.1	14.4
30°-40°	297.4	17.1
40°-50°	303.1	17.4
50°-60°	271.7	15.6
60°-70°	212.7	12.2
70°-80°	137.2	7.9
80°-90°	40.5	2.3
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°	478.0	27.5
0°-40°	775.4	44.5
0°-60°	1350.1	77.6
0°-90°	1740.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1740.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	624	624	624	624	624	
5°	617	619	622	623	624	59
15°	587	590	595	600	601	166
25°	531	536	547	555	558	244
35°	455	460	476	490	495	284
45°	365	374	393	413	419	282
55°	272	281	304	326	335	244
65°	179	189	218	239	248	177
75°	91	105	134	157	165	98
85°	22	30	39	39	39	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	623.7	623.7	623.7	623.7	623.7
2.5°	619.6	621.2	624.5	625.3	625.3
5°	617.2	618.8	622.1	622.9	623.7
7.5°	613.1	613.9	618.0	619.6	620.4
10°	606.6	608.2	612.3	614.7	615.6
12.5°	597.7	600.1	605.0	608.2	609.1
15°	587.1	590.4	595.3	600.1	600.9
17.5°	575.8	579.0	585.5	591.2	592.8
20°	562.0	566.0	573.3	579.8	582.3
22.5°	548.2	551.4	560.3	568.5	570.9
25°	531.1	536.0	547.3	554.6	557.9
27.5°	513.2	518.9	530.3	540.0	543.3
30°	494.6	500.2	512.4	524.6	528.7
32.5°	475.1	481.6	496.2	508.4	512.4
35°	454.8	460.4	475.9	490.5	495.4
37.5°	433.6	438.5	456.4	471.8	476.7
40°	410.9	417.4	436.1	454.0	458.8
42.5°	388.2	395.5	414.2	433.6	438.5
45°	365.4	373.6	393.0	413.3	419.0
47.5°	343.5	350.0	371.9	391.4	399.5
50°	320.0	326.5	347.6	369.5	377.6
52.5°	295.6	304.5	327.3	348.4	358.1
55°	272.0	281.0	304.5	325.6	334.6
57.5°	250.1	257.4	281.8	303.7	312.6
60°	226.6	233.1	259.1	282.6	290.7
62.5°	201.4	211.1	237.9	259.9	269.6
65°	178.7	189.2	217.6	238.8	248.5
67.5°	157.5	167.3	194.9	217.6	228.2
70°	133.2	146.2	174.6	197.3	207.1
72.5°	113.7	125.1	154.3	177.0	187.6
75°	91.0	104.8	134.0	156.7	164.9
77.5°	72.3	86.1	113.7	131.6	135.6
80°	52.8	66.6	92.6	101.5	103.9
82.5°	35.7	48.7	66.6	69.0	69.8
85°	21.9	30.0	39.0	39.0	39.0
87.5°	10.6	12.2	13.8	13.0	13.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)