

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: P390142

Luminaire Tested: **22CZ2-20VHE-RDP-UNV-L930-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: P390142
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: 22CZ2-20VHE-RDP-UNV-L930-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1100.4 lumens
Efficiency: N/A
Efficacy: 77.5 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

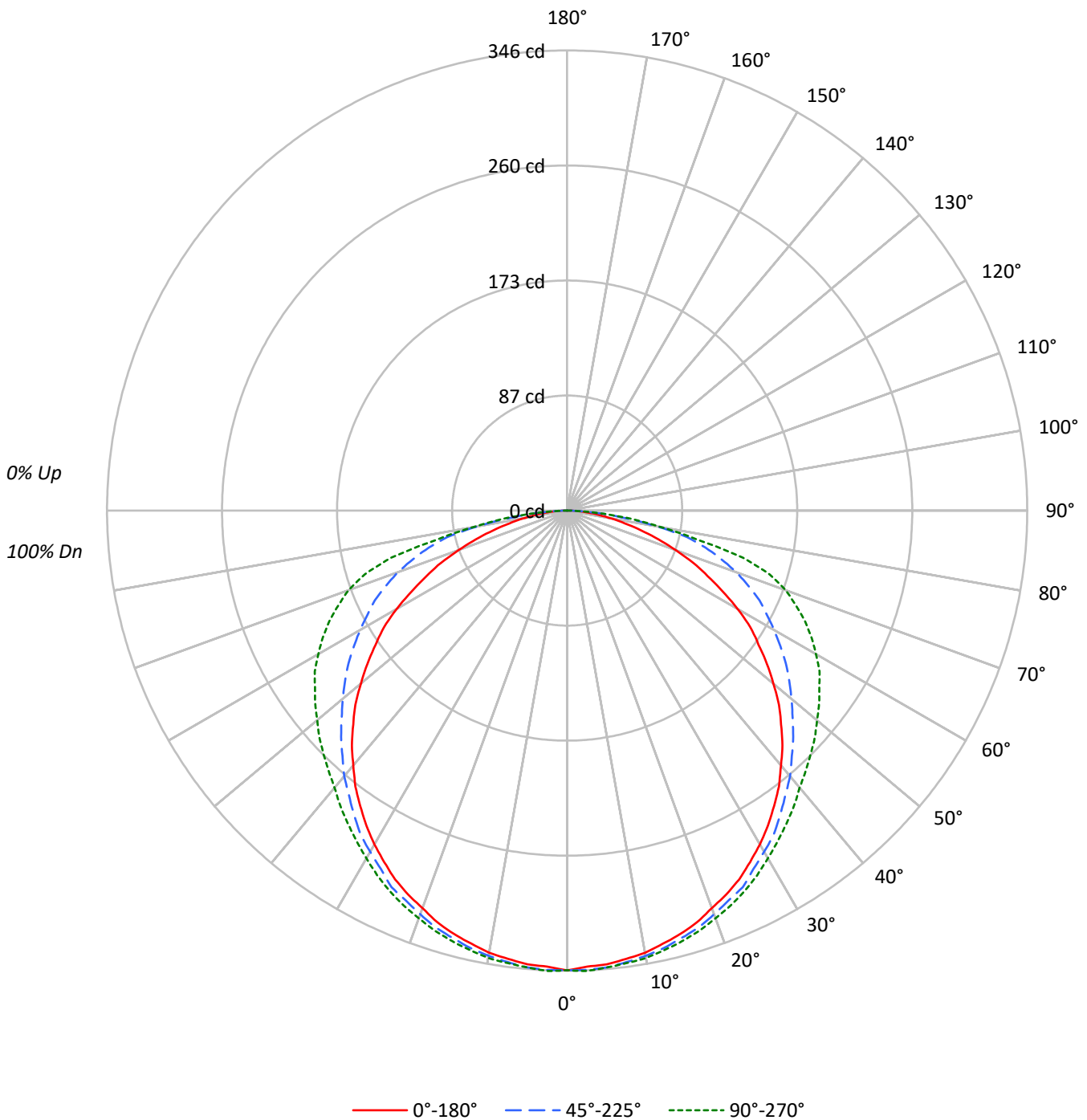
Input Watts (W): 14.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	930	930	930
5°	925	931	931
10°	922	929	933
15°	918	927	934
20°	911	925	934
25°	909	928	937
30°	900	921	938
35°	891	918	944
40°	879	916	955
45°	866	915	986
50°	847	922	1027
55°	824	942	1086
60°	797	967	1163
65°	742	1016	1258
70°	681	1064	1376
75°	598	1120	1422
80°	514	1066	1116
85°	451	775	849



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.7	3.0
10°-20°	93.9	8.5
20°-30°	143.2	13.0
30°-40°	174.9	15.9
40°-50°	187.0	17.0
50°-60°	180.5	16.4
60°-70°	155.4	14.1
70°-80°	105.1	9.6
80°-90°	27.7	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°	269.8	24.5
0°-40°	444.7	40.4
0°-60°	812.2	73.8
0°-90°	1100.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1100.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	346	346	346	346	346	
5°	342	343	345	345	345	33
15°	330	330	333	334	335	93
25°	306	308	312	314	316	141
35°	271	274	279	285	287	170
45°	228	232	240	253	259	176
55°	176	181	201	221	232	157
65°	117	128	160	185	198	116
75°	58	76	108	130	137	62
85°	15	20	25	26	28	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	345.7	345.7	345.7	345.7	345.7
2.5°	343.2	344.0	345.7	345.7	346.5
5°	342.4	343.2	344.8	344.8	344.8
7.5°	340.0	340.8	342.4	343.2	343.2
10°	337.6	338.4	340.0	340.8	341.6
12.5°	333.5	334.3	336.8	338.4	338.4
15°	329.5	330.3	332.7	334.3	335.1
17.5°	324.6	326.2	328.7	330.3	331.1
20°	318.1	319.8	323.0	325.4	326.2
22.5°	312.5	314.1	317.3	319.8	321.4
25°	306.0	307.6	312.5	314.1	315.7
27.5°	297.9	299.5	303.6	306.8	309.2
30°	289.8	291.4	296.3	300.3	301.9
32.5°	280.9	283.3	289.0	292.2	294.7
35°	271.2	273.6	279.3	284.9	287.4
37.5°	261.5	263.9	269.6	276.8	280.1
40°	250.1	253.4	260.7	270.4	272.0
42.5°	239.6	243.7	250.1	261.5	265.5
45°	227.5	231.5	240.4	252.6	259.0
47.5°	216.1	220.2	229.9	244.5	252.6
50°	202.4	208.0	220.2	237.2	245.3
52.5°	189.4	194.3	210.5	229.1	238.8
55°	175.7	181.3	200.8	221.0	231.5
57.5°	163.5	168.4	190.2	212.9	225.0
60°	148.1	154.6	179.7	204.0	216.1
62.5°	131.9	141.7	169.2	194.3	207.2
65°	116.6	127.9	159.5	184.6	197.5
67.5°	102.8	114.9	147.3	174.0	186.2
70°	86.6	102.0	135.2	161.1	174.9
72.5°	72.0	89.0	121.4	147.3	159.5
75°	57.5	76.1	107.7	129.5	136.8
77.5°	44.5	62.3	92.3	98.8	99.6
80°	33.2	49.4	68.8	69.6	72.0
82.5°	22.7	34.8	44.5	48.6	49.4
85°	14.6	20.2	25.1	25.9	27.5
87.5°	6.5	7.3	8.9	8.1	8.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)