

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: P390148

Luminaire Tested: **22CZ2-20VHE-RDP-UNV-L940-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: P390148
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-L940-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1139.3 lumens
Efficiency: N/A
Efficacy: 80.2 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

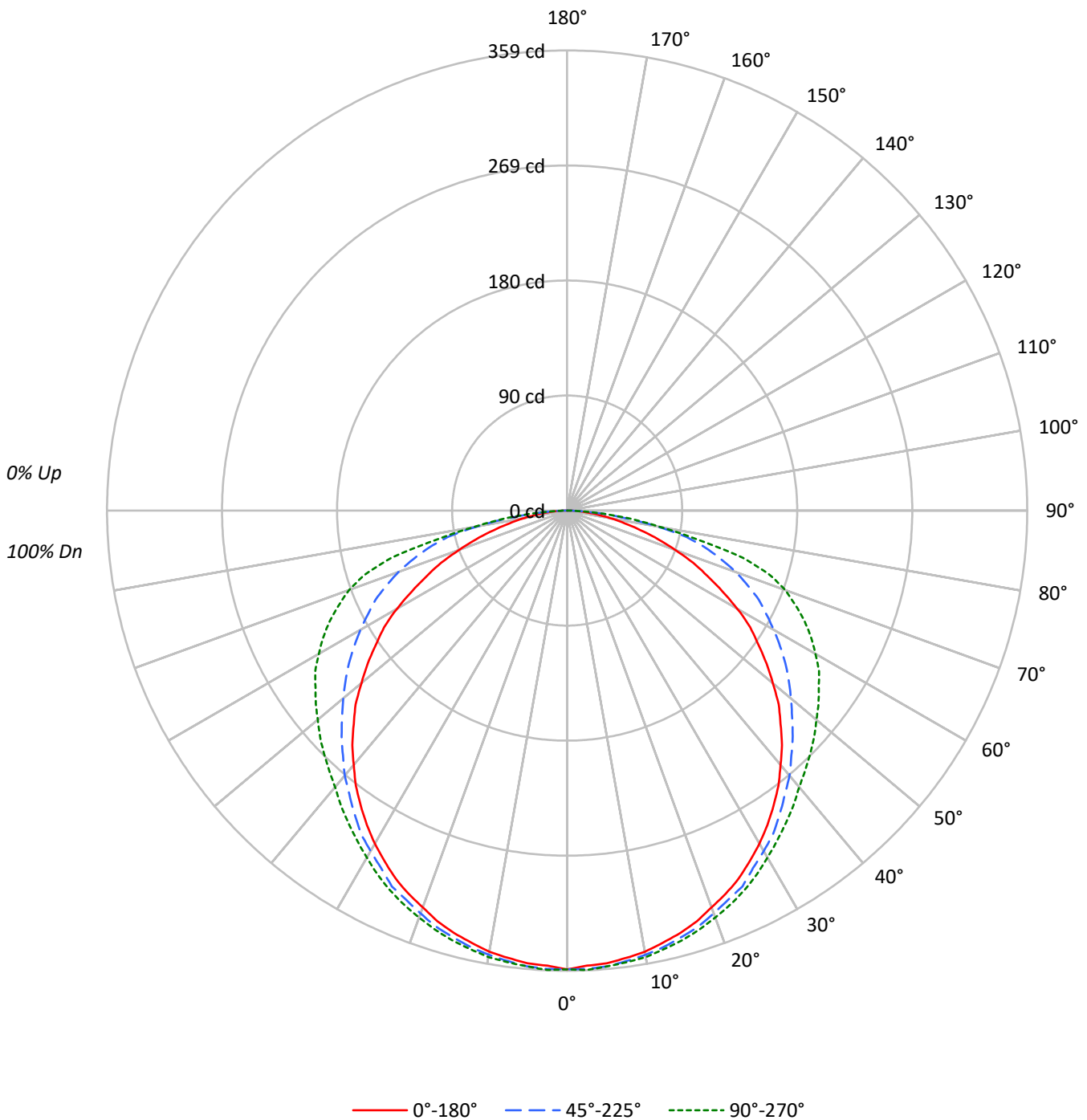
Input Watts (W): 14.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	963	963	963
5°	958	964	964
10°	955	962	966
15°	950	960	967
20°	943	958	967
25°	941	961	971
30°	932	953	971
35°	922	950	977
40°	910	948	989
45°	896	947	1021
50°	877	955	1063
55°	853	975	1125
60°	826	1002	1204
65°	769	1051	1302
70°	706	1102	1424
75°	619	1159	1472
80°	533	1103	1156
85°	466	803	880



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.9	3.0
10°-20°	97.2	8.5
20°-30°	148.3	13.0
30°-40°	181.1	15.9
40°-50°	193.6	17.0
50°-60°	186.9	16.4
60°-70°	160.9	14.1
70°-80°	108.8	9.6
80°-90°	28.7	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°	279.3	24.5
0°-40°	460.4	40.4
0°-60°	840.9	73.8
0°-90°	1139.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1139.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	358	358	358	358	358	
5°	354	355	357	357	357	34
15°	341	342	344	346	347	96
25°	317	318	324	325	327	146
35°	281	283	289	295	298	176
45°	236	240	249	262	268	182
55°	182	188	208	229	240	163
65°	121	132	165	191	204	120
75°	60	79	112	134	142	64
85°	15	21	26	27	28	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	357.9	357.9	357.9	357.9	357.9
2.5°	355.4	356.2	357.9	357.9	358.7
5°	354.5	355.4	357.0	357.0	357.0
7.5°	352.0	352.8	354.5	355.4	355.4
10°	349.5	350.3	352.0	352.8	353.7
12.5°	345.3	346.1	348.7	350.3	350.3
15°	341.1	341.9	344.5	346.1	347.0
17.5°	336.1	337.8	340.3	341.9	342.8
20°	329.4	331.1	334.4	336.9	337.8
22.5°	323.5	325.2	328.5	331.1	332.7
25°	316.8	318.5	323.5	325.2	326.9
27.5°	308.4	310.1	314.3	317.6	320.2
30°	300.0	301.7	306.7	310.9	312.6
32.5°	290.8	293.3	299.2	302.6	305.1
35°	280.8	283.3	289.1	295.0	297.5
37.5°	270.7	273.2	279.1	286.6	290.0
40°	259.0	262.3	269.9	279.9	281.6
42.5°	248.1	252.3	259.0	270.7	274.9
45°	235.5	239.7	248.9	261.5	268.2
47.5°	223.8	228.0	238.0	253.1	261.5
50°	209.5	215.4	228.0	245.6	253.9
52.5°	196.1	201.1	217.9	237.2	247.2
55°	181.9	187.7	207.9	228.8	239.7
57.5°	169.3	174.3	197.0	220.4	233.0
60°	153.4	160.1	186.1	211.2	223.8
62.5°	136.6	146.7	175.2	201.1	214.6
65°	120.7	132.4	165.1	191.1	204.5
67.5°	106.4	119.0	152.5	180.2	192.8
70°	89.7	105.6	140.0	166.8	181.0
72.5°	74.6	92.2	125.7	152.5	165.1
75°	59.5	78.8	111.5	134.1	141.6
77.5°	46.1	64.5	95.5	102.2	103.1
80°	34.4	51.1	71.2	72.1	74.6
82.5°	23.5	36.0	46.1	50.3	51.1
85°	15.1	21.0	26.0	26.8	28.5
87.5°	6.7	7.5	9.2	8.4	8.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)