

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: P390149

Luminaire Tested: **22CZ2-20VHE-RDP-UNV-L940-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: P390149
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-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: 1153.6 lumens
Efficiency: N/A
Efficacy: 81.2 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

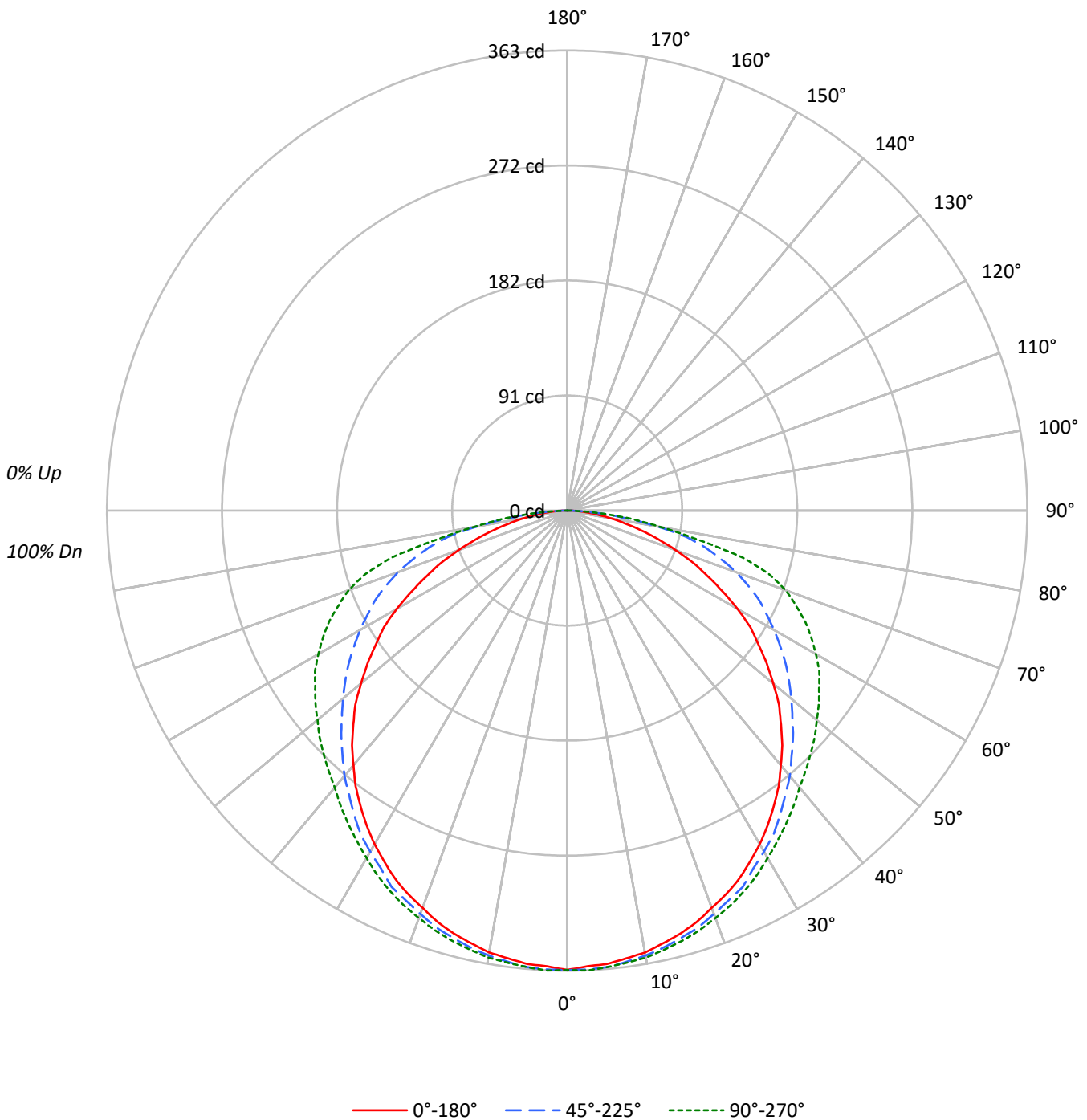
Input Watts (W): 14.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	975	975	975
5°	970	977	977
10°	967	974	979
15°	962	972	979
20°	955	970	979
25°	953	973	983
30°	944	965	983
35°	934	962	990
40°	921	960	1002
45°	908	959	1034
50°	888	966	1076
55°	864	988	1139
60°	836	1014	1220
65°	778	1065	1319
70°	714	1115	1442
75°	627	1174	1491
80°	539	1117	1170
85°	472	812	892



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.3	3.0
10°-20°	98.4	8.5
20°-30°	150.2	13.0
30°-40°	183.3	15.9
40°-50°	196.0	17.0
50°-60°	189.2	16.4
60°-70°	162.9	14.1
70°-80°	110.2	9.6
80°-90°	29.1	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°	282.8	24.5
0°-40°	466.2	40.4
0°-60°	851.4	73.8
0°-90°	1153.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1153.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	362	362	362	362	362	
5°	359	360	362	362	362	34
15°	345	346	349	350	351	97
25°	321	322	328	329	331	148
35°	284	287	293	299	301	178
45°	238	243	252	265	272	184
55°	184	190	210	232	243	165
65°	122	134	167	194	207	122
75°	60	80	113	136	143	65
85°	15	21	26	27	29	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	362.4	362.4	362.4	362.4	362.4
2.5°	359.8	360.7	362.4	362.4	363.2
5°	359.0	359.8	361.5	361.5	361.5
7.5°	356.4	357.3	359.0	359.8	359.8
10°	353.9	354.7	356.4	357.3	358.1
12.5°	349.6	350.5	353.0	354.7	354.7
15°	345.4	346.2	348.8	350.5	351.3
17.5°	340.3	342.0	344.5	346.2	347.1
20°	333.5	335.2	338.6	341.2	342.0
22.5°	327.6	329.3	332.7	335.2	336.9
25°	320.8	322.5	327.6	329.3	331.0
27.5°	312.3	314.0	318.2	321.6	324.2
30°	303.8	305.5	310.6	314.8	316.5
32.5°	294.5	297.0	303.0	306.4	308.9
35°	284.3	286.8	292.8	298.7	301.3
37.5°	274.1	276.7	282.6	290.2	293.6
40°	262.2	265.6	273.3	283.4	285.1
42.5°	251.2	255.4	262.2	274.1	278.4
45°	238.5	242.7	252.0	264.8	271.6
47.5°	226.6	230.8	241.0	256.3	264.8
50°	212.2	218.1	230.8	248.6	257.1
52.5°	198.6	203.7	220.6	240.2	250.3
55°	184.2	190.1	210.5	231.7	242.7
57.5°	171.4	176.5	199.4	223.2	235.9
60°	155.3	162.1	188.4	213.9	226.6
62.5°	138.3	148.5	177.4	203.7	217.2
65°	122.2	134.1	167.2	193.5	207.1
67.5°	107.8	120.5	154.5	182.5	195.2
70°	90.8	106.9	141.7	168.9	183.3
72.5°	75.5	93.3	127.3	154.5	167.2
75°	60.3	79.8	112.9	135.8	143.4
77.5°	46.7	65.3	96.7	103.5	104.4
80°	34.8	51.8	72.1	73.0	75.5
82.5°	23.8	36.5	46.7	50.9	51.8
85°	15.3	21.2	26.3	27.2	28.9
87.5°	6.8	7.6	9.3	8.5	8.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)