

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: P390224

Luminaire Tested: **22CZ2-29VHE-HRP-UNV-L950-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: P390224
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: 22CZ2-29VHE-HRP-UNV-L950-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2396.7 lumens
Efficiency: N/A
Efficacy: 110.4 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

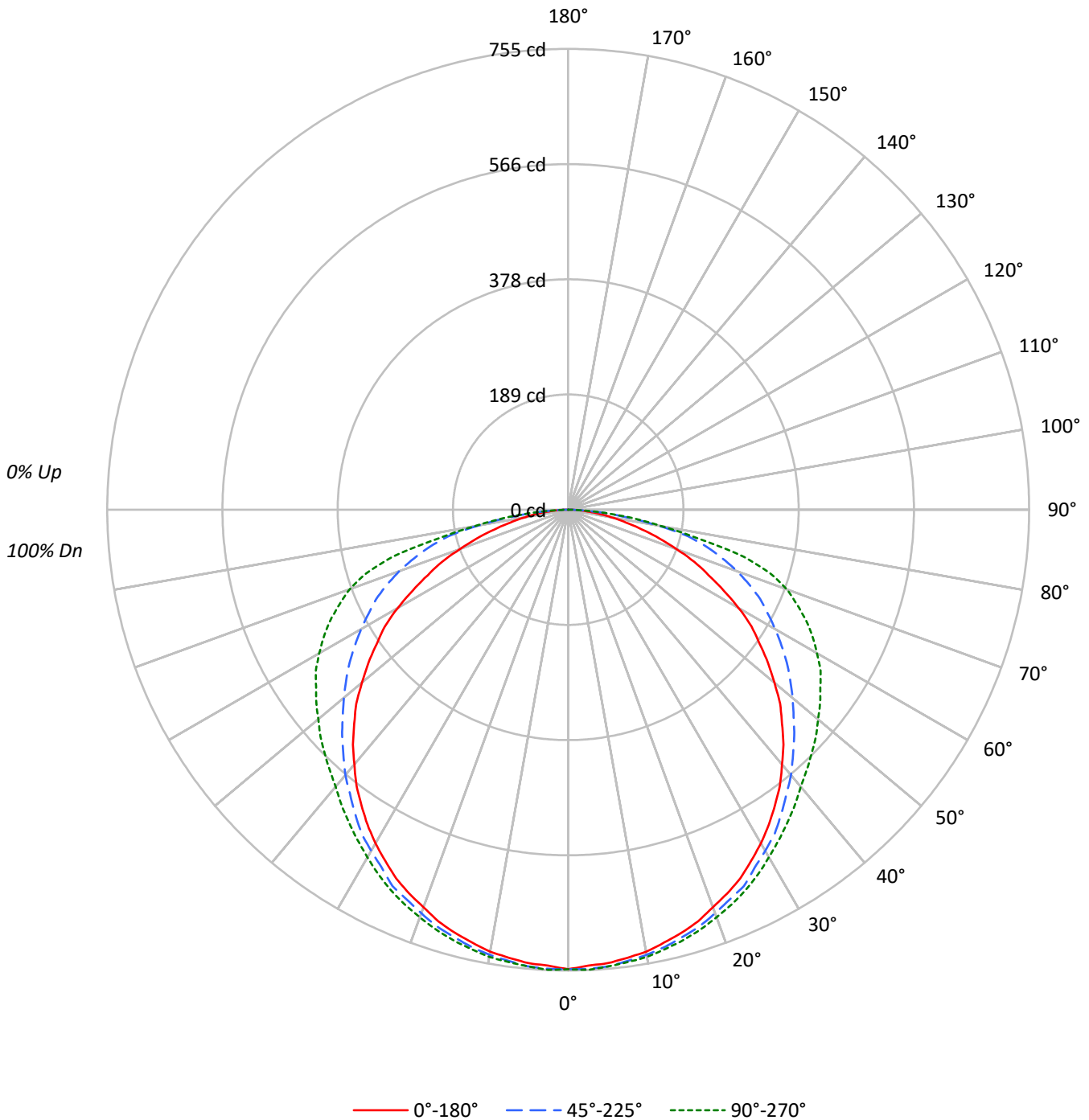
Input Watts (W): 21.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2026	2026	2026
5°	2015	2029	2029
10°	2009	2023	2033
15°	1999	2019	2033
20°	1984	2015	2035
25°	1979	2021	2042
30°	1961	2005	2043
35°	1940	1998	2056
40°	1914	1994	2081
45°	1885	1993	2147
50°	1845	2008	2236
55°	1795	2051	2365
60°	1736	2106	2533
65°	1617	2211	2739
70°	1485	2316	2996
75°	1302	2438	3098
80°	1120	2323	2431
85°	979	1689	1849



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.2	3.0
10°-20°	204.5	8.5
20°-30°	312.0	13.0
30°-40°	380.9	15.9
40°-50°	407.3	17.0
50°-60°	393.1	16.4
60°-70°	338.4	14.1
70°-80°	229.0	9.6
80°-90°	60.4	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°	587.6	24.5
0°-40°	968.5	40.4
0°-60°	1768.9	73.8
0°-90°	2396.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2396.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	753	753	753	753	753	
5°	746	748	751	751	751	71
15°	718	719	725	728	730	202
25°	666	670	681	684	688	307
35°	591	596	608	621	626	370
45°	495	504	524	550	564	382
55°	383	395	437	481	504	343
65°	254	279	347	402	430	252
75°	125	166	234	282	298	134
85°	32	44	55	56	60	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	752.8	752.8	752.8	752.8	752.8
2.5°	747.6	749.3	752.8	752.8	754.6
5°	745.8	747.6	751.1	751.1	751.1
7.5°	740.5	742.3	745.8	747.6	747.6
10°	735.2	737.0	740.5	742.3	744.0
12.5°	726.4	728.2	733.5	737.0	737.0
15°	717.6	719.3	724.6	728.2	729.9
17.5°	707.0	710.5	715.8	719.3	721.1
20°	692.9	696.4	703.5	708.8	710.5
22.5°	680.6	684.1	691.1	696.4	700.0
25°	666.5	670.0	680.6	684.1	687.6
27.5°	648.8	652.3	661.2	668.2	673.5
30°	631.2	634.7	645.3	654.1	657.6
32.5°	611.8	617.1	629.4	636.5	641.8
35°	590.6	595.9	608.3	620.6	625.9
37.5°	569.5	574.8	587.1	603.0	610.0
40°	544.8	551.9	567.7	588.9	592.4
42.5°	521.9	530.7	544.8	569.5	578.3
45°	495.4	504.2	523.6	550.1	564.2
47.5°	470.7	479.6	500.7	532.5	550.1
50°	440.8	453.1	479.6	516.6	534.2
52.5°	412.6	423.1	458.4	499.0	520.1
55°	382.6	394.9	437.2	481.3	504.2
57.5°	356.1	366.7	414.3	463.7	490.1
60°	322.6	336.8	391.4	444.3	470.7
62.5°	287.4	308.5	368.5	423.1	451.4
65°	253.9	278.6	347.3	402.0	430.2
67.5°	223.9	250.4	320.9	379.1	405.5
70°	188.7	222.2	294.4	350.9	380.8
72.5°	156.9	193.9	264.5	320.9	347.3
75°	125.2	165.7	234.5	282.1	298.0
77.5°	97.0	135.8	201.0	215.1	216.9
80°	72.3	107.5	149.9	151.6	156.9
82.5°	49.4	75.8	97.0	105.8	107.5
85°	31.7	44.1	54.7	56.4	59.9
87.5°	14.1	15.9	19.4	17.6	17.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)