

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: P390268

Luminaire Tested: **22CZ2-34VHE-HRP-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: P390268
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: 22CZ2-34VHE-HRP-UNV-L940-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2576.5 lumens
Efficiency: N/A
Efficacy: 102.6 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

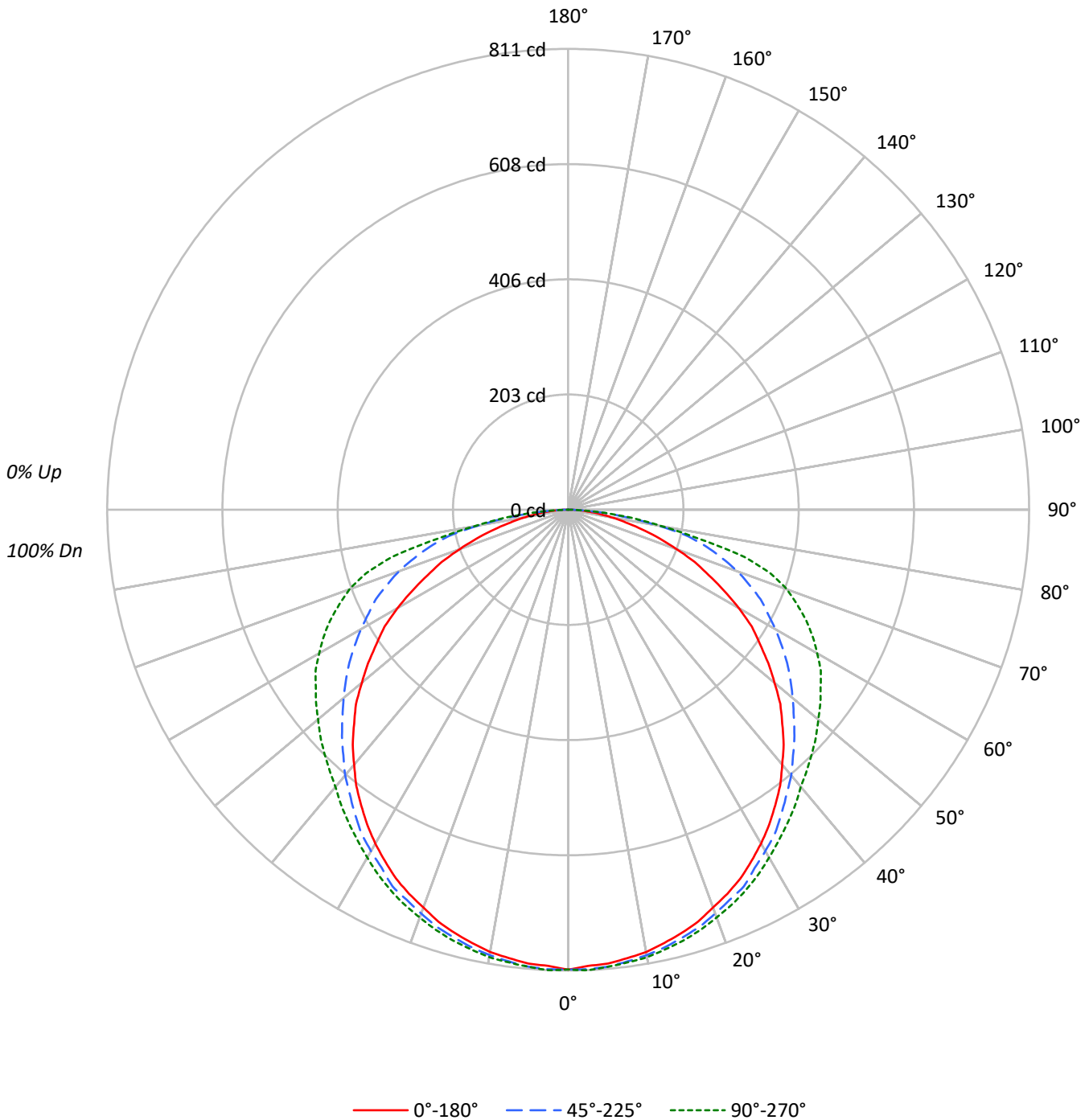
Input Watts (W): 25.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20				20			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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	
1	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82	82	
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67	67	
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55	55	
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47	47	
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40	40	
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35	35	
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31	31	
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27	27	
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24	24	
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22	22	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2178	2178	2178
5°	2166	2181	2181
10°	2160	2175	2185
15°	2149	2170	2186
20°	2133	2166	2187
25°	2127	2172	2195
30°	2108	2156	2197
35°	2086	2148	2211
40°	2057	2144	2237
45°	2027	2142	2308
50°	1984	2158	2404
55°	1930	2206	2543
60°	1867	2265	2724
65°	1738	2378	2945
70°	1596	2490	3221
75°	1399	2621	3330
80°	1204	2497	2614
85°	1053	1815	1988



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.6	3.0
10°-20°	219.8	8.5
20°-30°	335.4	13.0
30°-40°	409.5	15.9
40°-50°	437.8	17.0
50°-60°	422.6	16.4
60°-70°	363.8	14.1
70°-80°	246.1	9.6
80°-90°	65.0	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°	631.7	24.5
0°-40°	1041.2	40.4
0°-60°	1901.6	73.8
0°-90°	2576.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2576.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	809	809	809	809	809	
5°	802	804	807	807	807	76
15°	771	773	779	783	785	218
25°	716	720	732	735	739	330
35°	635	641	654	667	673	397
45°	533	542	563	591	606	411
55°	411	425	470	517	542	369
65°	273	300	373	432	462	271
75°	135	178	252	303	320	144
85°	34	47	59	61	64	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	809.3	809.3	809.3	809.3	809.3
2.5°	803.6	805.5	809.3	809.3	811.2
5°	801.7	803.6	807.4	807.4	807.4
7.5°	796.1	798.0	801.7	803.6	803.6
10°	790.4	792.3	796.1	798.0	799.8
12.5°	780.9	782.8	788.5	792.3	792.3
15°	771.4	773.3	779.0	782.8	784.7
17.5°	760.0	763.8	769.5	773.3	775.2
20°	744.9	748.7	756.3	761.9	763.8
22.5°	731.6	735.4	743.0	748.7	752.5
25°	716.5	720.2	731.6	735.4	739.2
27.5°	697.5	701.3	710.8	718.3	724.0
30°	678.5	682.3	693.7	703.2	707.0
32.5°	657.7	663.4	676.6	684.2	689.9
35°	634.9	640.6	653.9	667.2	672.9
37.5°	612.2	617.9	631.2	648.2	655.8
40°	585.7	593.3	610.3	633.1	636.8
42.5°	561.0	570.5	585.7	612.2	621.7
45°	532.6	542.1	562.9	591.4	606.5
47.5°	506.1	515.5	538.3	572.4	591.4
50°	473.8	487.1	515.5	555.3	574.3
52.5°	443.5	454.9	492.8	536.4	559.1
55°	411.3	424.6	470.1	517.4	542.1
57.5°	382.9	394.2	445.4	498.5	526.9
60°	346.9	362.0	420.8	477.6	506.1
62.5°	308.9	331.7	396.1	454.9	485.2
65°	272.9	299.5	373.4	432.1	462.5
67.5°	240.7	269.1	345.0	407.5	435.9
70°	202.8	238.8	316.5	377.2	409.4
72.5°	168.7	208.5	284.3	345.0	373.4
75°	134.6	178.2	252.1	303.3	320.3
77.5°	104.2	145.9	216.1	231.2	233.1
80°	77.7	115.6	161.1	163.0	168.7
82.5°	53.1	81.5	104.2	113.7	115.6
85°	34.1	47.4	58.8	60.7	64.4
87.5°	15.2	17.1	20.8	19.0	19.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)