

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: P390263

Luminaire Tested: **22CZ2-34VHE-HRP-UNV-L930-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: P390263
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-L930-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2519.8 lumens
Efficiency: N/A
Efficacy: 100.4 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

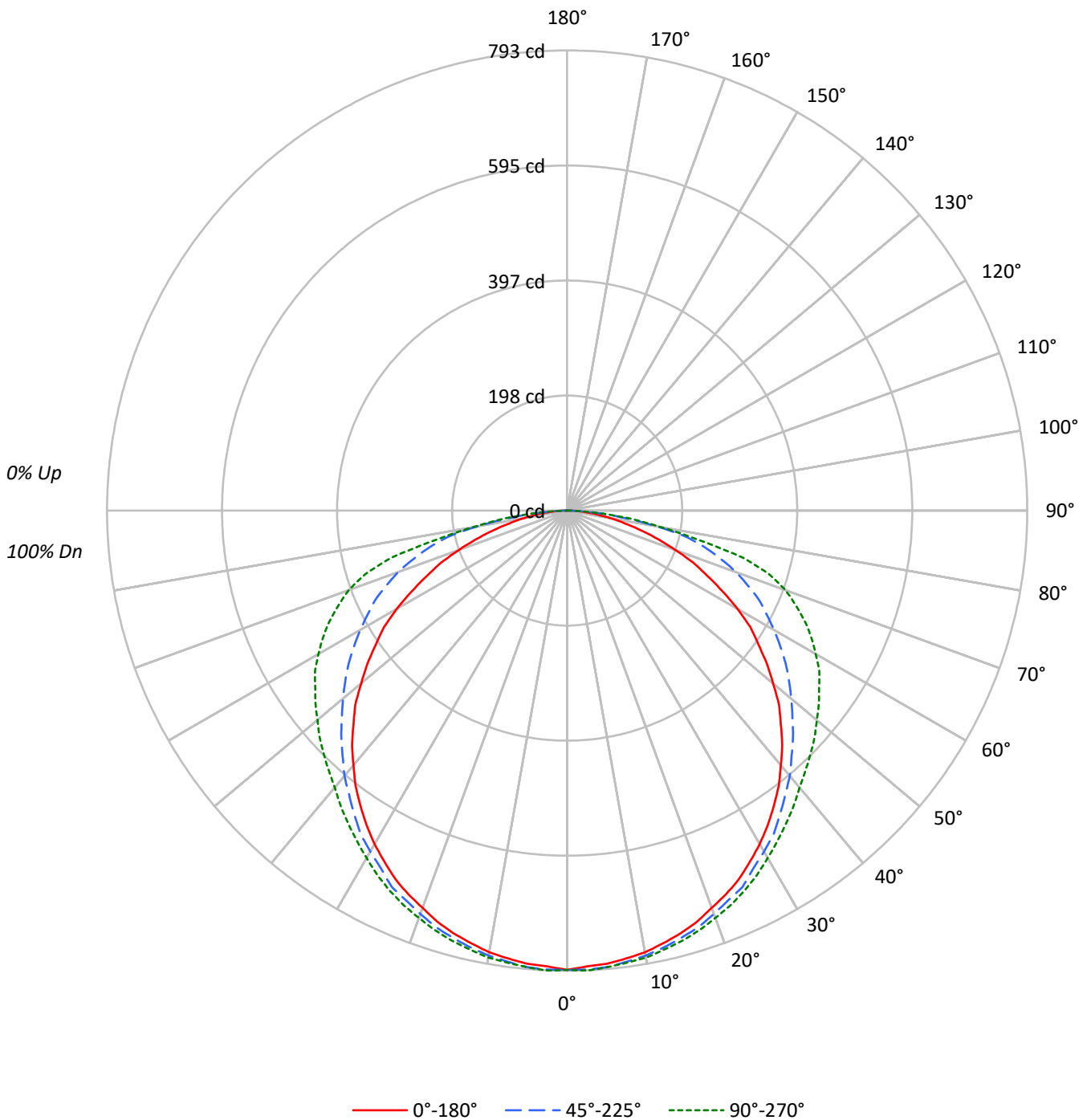
Input Watts (W): 25.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
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°	2130	2130	2130
5°	2118	2133	2133
10°	2112	2127	2137
15°	2102	2123	2138
20°	2086	2118	2139
25°	2080	2124	2146
30°	2062	2108	2148
35°	2040	2101	2162
40°	2012	2097	2188
45°	1982	2095	2257
50°	1940	2111	2352
55°	1887	2157	2487
60°	1826	2215	2664
65°	1699	2325	2880
70°	1560	2436	3150
75°	1368	2563	3257
80°	1178	2442	2557
85°	1031	1775	1945



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.9	3.0
10°-20°	215.0	8.5
20°-30°	328.0	13.0
30°-40°	400.5	15.9
40°-50°	428.2	17.0
50°-60°	413.3	16.4
60°-70°	355.8	14.1
70°-80°	240.7	9.6
80°-90°	63.5	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°	617.8	24.5
0°-40°	1018.3	40.4
0°-60°	1859.8	73.8
0°-90°	2519.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2519.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	792	792	792	792	792	
5°	784	786	790	790	790	74
15°	754	756	762	766	767	213
25°	701	704	716	719	723	322
35°	621	626	640	652	658	389
45°	521	530	550	578	593	402
55°	402	415	460	506	530	360
65°	267	293	365	423	452	265
75°	132	174	246	297	313	141
85°	33	46	58	59	63	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	791.5	791.5	791.5	791.5	791.5
2.5°	786.0	787.8	791.5	791.5	793.4
5°	784.1	786.0	789.7	789.7	789.7
7.5°	778.5	780.4	784.1	786.0	786.0
10°	773.0	774.8	778.5	780.4	782.2
12.5°	763.7	765.6	771.1	774.8	774.8
15°	754.4	756.3	761.9	765.6	767.4
17.5°	743.3	747.0	752.6	756.3	758.1
20°	728.5	732.2	739.6	745.2	747.0
22.5°	715.5	719.2	726.6	732.2	735.9
25°	700.7	704.4	715.5	719.2	722.9
27.5°	682.1	685.9	695.1	702.5	708.1
30°	663.6	667.3	678.4	687.7	691.4
32.5°	643.2	648.8	661.8	669.2	674.7
35°	621.0	626.5	639.5	652.5	658.0
37.5°	598.7	604.3	617.3	634.0	641.4
40°	572.8	580.2	596.9	619.1	622.8
42.5°	548.7	558.0	572.8	598.7	608.0
45°	520.9	530.1	550.5	578.3	593.2
47.5°	494.9	504.2	526.4	559.8	578.3
50°	463.4	476.4	504.2	543.1	561.7
52.5°	433.8	444.9	482.0	524.6	546.8
55°	402.2	415.2	459.7	506.0	530.1
57.5°	374.4	385.6	435.6	487.5	515.3
60°	339.2	354.0	411.5	467.1	494.9
62.5°	302.1	324.4	387.4	444.9	474.5
65°	266.9	292.9	365.2	422.6	452.3
67.5°	235.4	263.2	337.4	398.5	426.3
70°	198.3	233.6	309.6	368.9	400.4
72.5°	165.0	203.9	278.0	337.4	365.2
75°	131.6	174.2	246.5	296.6	313.3
77.5°	102.0	142.7	211.3	226.1	228.0
80°	76.0	113.1	157.6	159.4	165.0
82.5°	51.9	79.7	102.0	111.2	113.1
85°	33.4	46.3	57.5	59.3	63.0
87.5°	14.8	16.7	20.4	18.5	18.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)