

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: P390261

Luminaire Tested: **22CZ2-34VHE-HRP-UNV-L930-CD1-SDWPD1-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: P390261
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-SDWPD1-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: 2458.6 lumens
Efficiency: N/A
Efficacy: 98.0 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

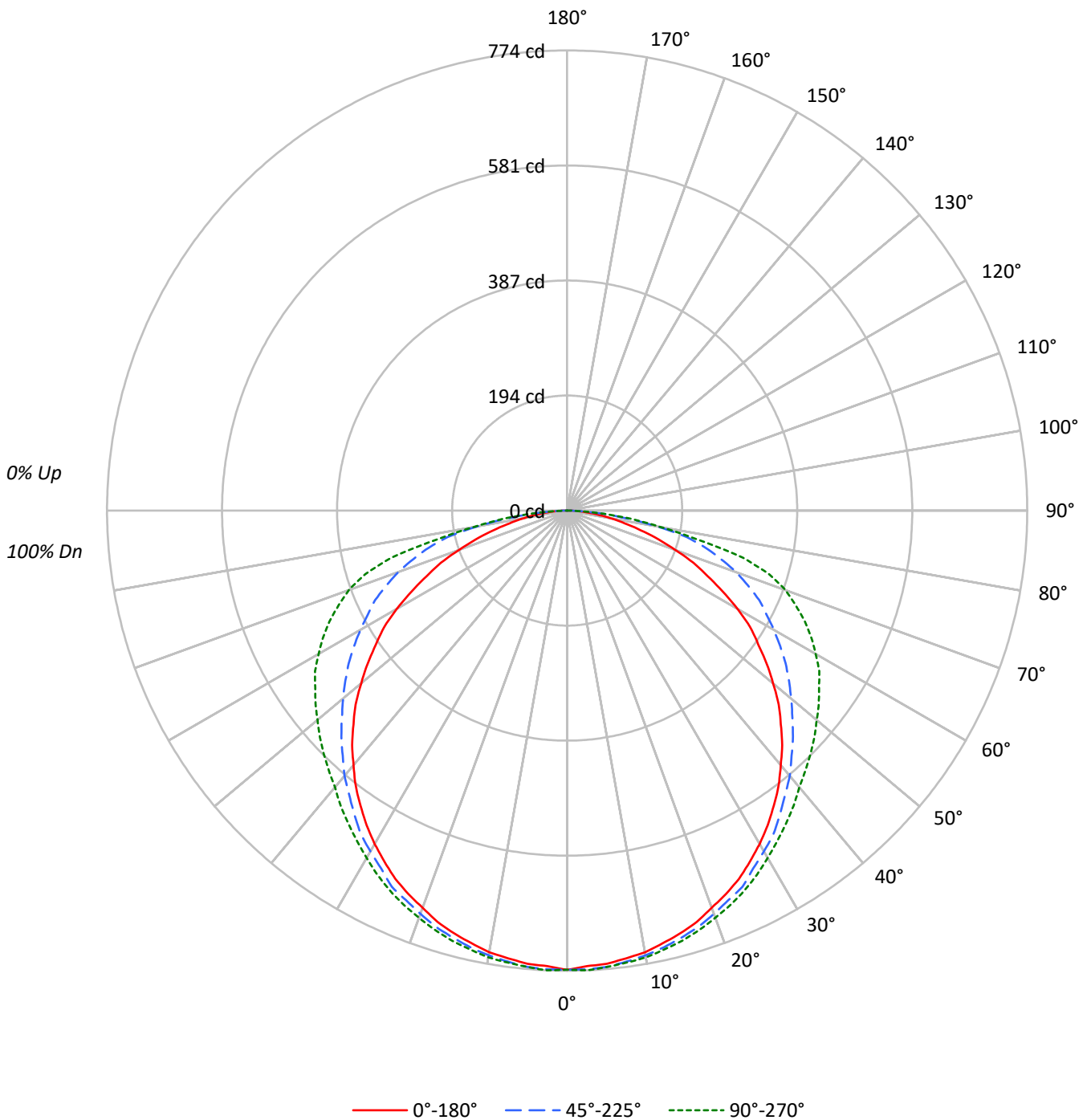
Input Watts (W): 25.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2078	2078	2078
5°	2067	2081	2081
10°	2061	2076	2085
15°	2051	2071	2086
20°	2036	2066	2087
25°	2030	2073	2094
30°	2012	2057	2096
35°	1990	2050	2109
40°	1963	2046	2135
45°	1934	2044	2203
50°	1893	2059	2294
55°	1841	2104	2427
60°	1781	2161	2599
65°	1658	2269	2810
70°	1522	2376	3074
75°	1335	2501	3178
80°	1150	2382	2495
85°	1007	1732	1899



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.1	3.0
10°-20°	209.8	8.5
20°-30°	320.0	13.0
30°-40°	390.7	15.9
40°-50°	417.8	17.0
50°-60°	403.3	16.4
60°-70°	347.1	14.1
70°-80°	234.9	9.6
80°-90°	62.0	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°	602.8	24.5
0°-40°	993.6	40.4
0°-60°	1814.6	73.8
0°-90°	2458.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2458.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	772	772	772	772	772	
5°	765	767	770	770	770	73
15°	736	738	743	747	749	208
25°	684	687	698	702	705	315
35°	606	611	624	637	642	379
45°	508	517	537	564	579	392
55°	392	405	448	494	517	352
65°	260	286	356	412	441	259
75°	128	170	240	289	306	138
85°	33	45	56	58	62	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	772.3	772.3	772.3	772.3	772.3
2.5°	766.9	768.7	772.3	772.3	774.1
5°	765.1	766.9	770.5	770.5	770.5
7.5°	759.6	761.4	765.1	766.9	766.9
10°	754.2	756.0	759.6	761.4	763.2
12.5°	745.2	747.0	752.4	756.0	756.0
15°	736.1	737.9	743.4	747.0	748.8
17.5°	725.3	728.9	734.3	737.9	739.7
20°	710.8	714.4	721.6	727.1	728.9
22.5°	698.1	701.8	709.0	714.4	718.0
25°	683.7	687.3	698.1	701.8	705.4
27.5°	665.6	669.2	678.2	685.5	690.9
30°	647.5	651.1	662.0	671.0	674.6
32.5°	627.6	633.0	645.7	652.9	658.3
35°	605.9	611.3	624.0	636.6	642.1
37.5°	584.2	589.6	602.3	618.6	625.8
40°	558.9	566.1	582.4	604.1	607.7
42.5°	535.4	544.4	558.9	584.2	593.2
45°	508.2	517.3	537.2	564.3	578.8
47.5°	482.9	491.9	513.7	546.2	564.3
50°	452.2	464.8	491.9	529.9	548.0
52.5°	423.2	434.1	470.2	511.8	533.5
55°	392.5	405.1	448.5	493.8	517.3
57.5°	365.3	376.2	425.0	475.7	502.8
60°	331.0	345.5	401.5	455.8	482.9
62.5°	294.8	316.5	378.0	434.1	463.0
65°	260.4	285.8	356.3	412.4	441.3
67.5°	229.7	256.8	329.2	388.9	416.0
70°	193.5	227.9	302.0	359.9	390.7
72.5°	161.0	199.0	271.3	329.2	356.3
75°	128.4	170.0	240.5	289.4	305.7
77.5°	99.5	139.3	206.2	220.7	222.5
80°	74.2	110.3	153.7	155.5	161.0
82.5°	50.6	77.8	99.5	108.5	110.3
85°	32.6	45.2	56.1	57.9	61.5
87.5°	14.5	16.3	19.9	18.1	18.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)