

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: P390262

Luminaire Tested: **22CZ2-34VHE-HRP-UNV-L930-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: P390262
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-SWPD1-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: 2488.6 lumens
Efficiency: N/A
Efficacy: 99.1 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

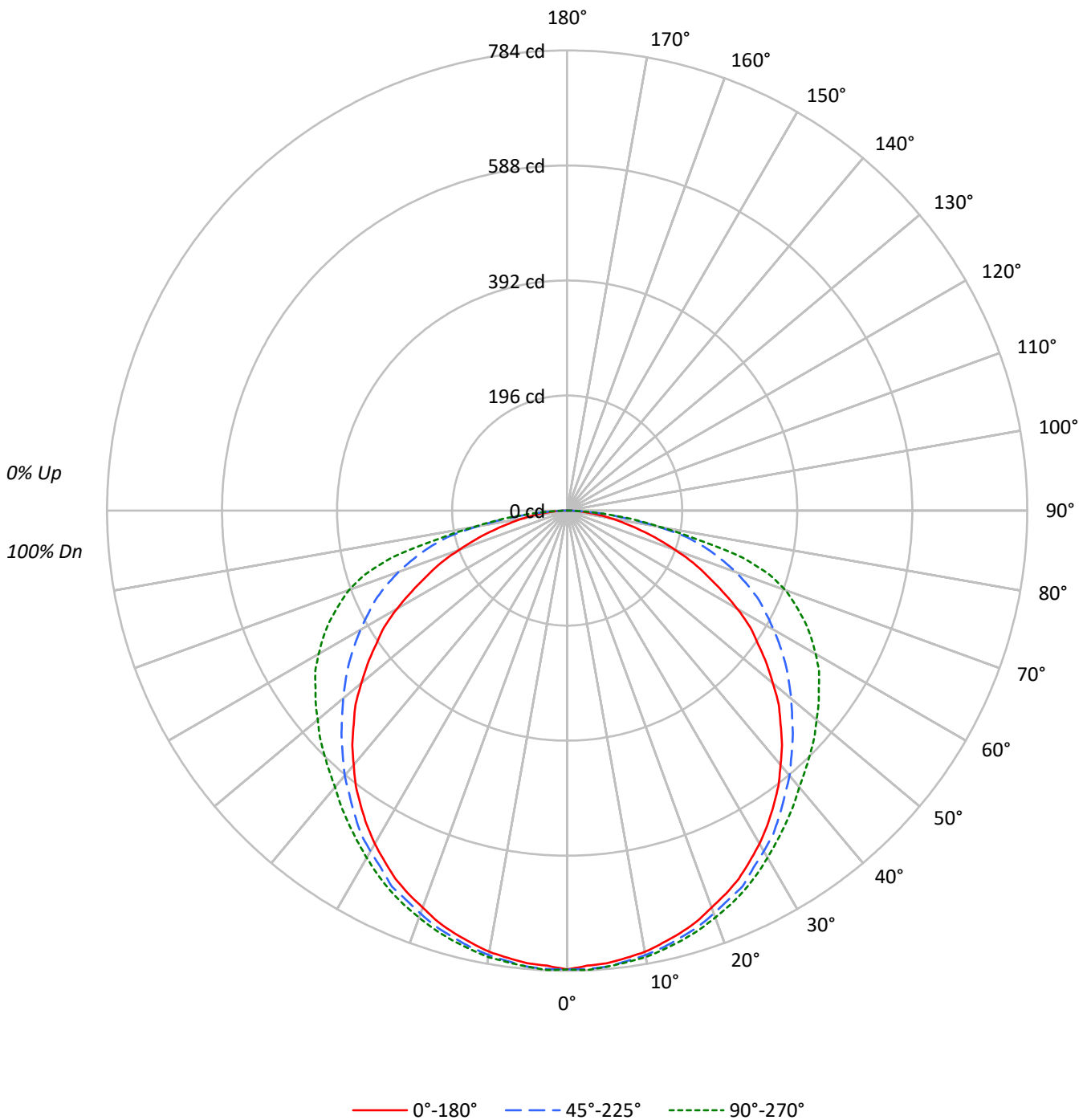
Input Watts (W): 25.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2104	2104	2104
5°	2092	2107	2107
10°	2086	2101	2111
15°	2076	2096	2111
20°	2060	2092	2113
25°	2055	2098	2120
30°	2037	2082	2122
35°	2015	2075	2135
40°	1987	2071	2161
45°	1958	2069	2229
50°	1916	2085	2322
55°	1864	2130	2457
60°	1803	2187	2631
65°	1678	2296	2844
70°	1541	2405	3111
75°	1352	2532	3217
80°	1164	2411	2524
85°	1019	1754	1920



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.9	3.0
10°-20°	212.3	8.5
20°-30°	323.9	13.0
30°-40°	395.5	15.9
40°-50°	422.9	17.0
50°-60°	408.2	16.4
60°-70°	351.4	14.1
70°-80°	237.7	9.6
80°-90°	62.7	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°	610.2	24.5
0°-40°	1005.7	40.4
0°-60°	1836.8	73.8
0°-90°	2488.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2488.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	782	782	782	782	782	
5°	774	776	780	780	780	74
15°	745	747	752	756	758	210
25°	692	696	707	710	714	318
35°	613	619	632	644	650	384
45°	514	524	544	571	586	397
55°	397	410	454	500	524	356
65°	264	289	361	417	447	262
75°	130	172	244	293	309	139
85°	33	46	57	59	62	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	781.7	781.7	781.7	781.7	781.7
2.5°	776.2	778.1	781.7	781.7	783.5
5°	774.4	776.2	779.9	779.9	779.9
7.5°	768.9	770.7	774.4	776.2	776.2
10°	763.4	765.2	768.9	770.7	772.6
12.5°	754.3	756.1	761.6	765.2	765.2
15°	745.1	746.9	752.4	756.1	757.9
17.5°	734.1	737.8	743.3	746.9	748.8
20°	719.5	723.1	730.5	735.9	737.8
22.5°	706.7	710.3	717.6	723.1	726.8
25°	692.0	695.7	706.7	710.3	714.0
27.5°	673.7	677.4	686.5	693.8	699.3
30°	655.4	659.1	670.0	679.2	682.9
32.5°	635.3	640.7	653.6	660.9	666.4
35°	613.3	618.8	631.6	644.4	649.9
37.5°	591.3	596.8	609.6	626.1	633.4
40°	565.7	573.0	589.5	611.5	615.1
42.5°	541.9	551.0	565.7	591.3	600.5
45°	514.4	523.6	543.7	571.2	585.8
47.5°	488.8	498.0	519.9	552.9	571.2
50°	457.7	470.5	498.0	536.4	554.7
52.5°	428.4	439.4	476.0	518.1	540.1
55°	397.3	410.1	454.0	499.8	523.6
57.5°	369.8	380.8	430.2	481.5	508.9
60°	335.0	349.7	406.4	461.3	488.8
62.5°	298.4	320.4	382.6	439.4	468.7
65°	263.6	289.3	360.6	417.4	446.7
67.5°	232.5	260.0	333.2	393.6	421.1
70°	195.9	230.7	305.7	364.3	395.4
72.5°	162.9	201.4	274.6	333.2	360.6
75°	130.0	172.1	243.5	292.9	309.4
77.5°	100.7	141.0	208.7	223.3	225.2
80°	75.1	111.7	155.6	157.4	162.9
82.5°	51.3	78.7	100.7	109.8	111.7
85°	33.0	45.8	56.8	58.6	62.2
87.5°	14.6	16.5	20.1	18.3	18.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)