

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: P387868

Luminaire Tested: **22CZ2-34HE-SQR-UNV-L935-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: P387868
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-542-6)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-34HE-SQR-UNV-L935-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2715.3 lumens
Efficiency: N/A
Efficacy: 105.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

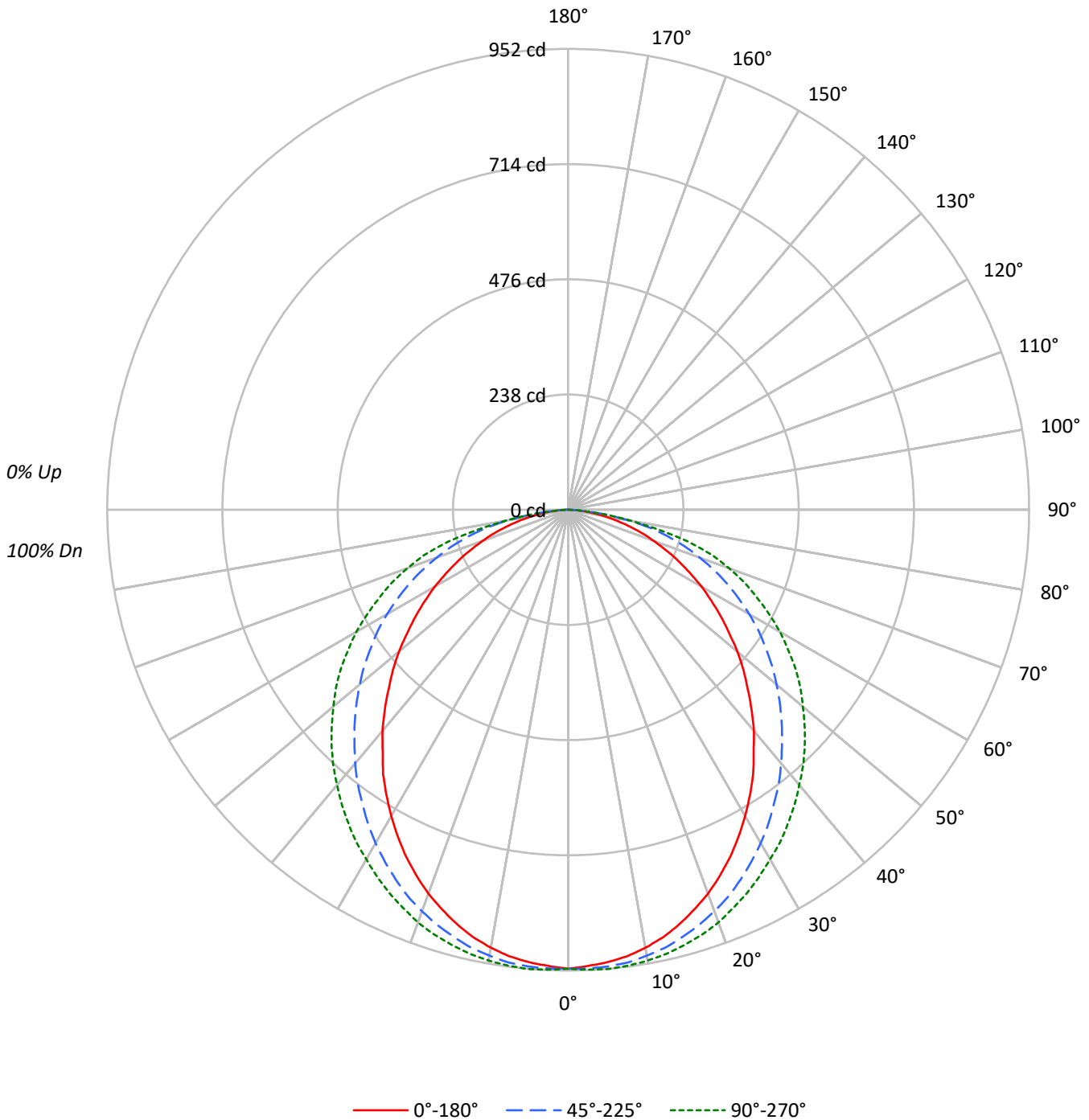
Input Watts (W): 25.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	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
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2552	2552	2552
5°	2534	2559	2573
10°	2511	2557	2585
15°	2470	2545	2592
20°	2417	2528	2598
25°	2350	2502	2594
30°	2270	2471	2591
35°	2189	2434	2599
40°	2096	2404	2608
45°	1996	2374	2629
50°	1910	2352	2649
55°	1808	2334	2691
60°	1713	2323	2719
65°	1600	2306	2741
70°	1471	2271	2778
75°	1327	2210	2679
80°	1139	1957	2018
85°	914	1155	914



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.9	3.3
10°-20°	257.1	9.5
20°-30°	386.1	14.2
30°-40°	460.5	17.0
40°-50°	476.1	17.5
50°-60°	437.8	16.1
60°-70°	348.5	12.8
70°-80°	212.9	7.8
80°-90°	46.3	1.7
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°	733.2	27.0
0°-40°	1193.7	44.0
0°-60°	2107.6	77.6
0°-90°	2715.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2715.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	948	948	948	948	948	
5°	938	941	947	951	952	89
15°	887	897	914	927	930	250
25°	791	811	843	866	874	364
35°	666	695	741	780	791	416
45°	524	562	624	674	691	406
55°	385	428	498	554	574	345
65°	251	294	362	412	430	249
75°	128	165	213	250	258	136
85°	30	36	37	32	30	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	948.5	948.5	948.5	948.5	948.5
2.5°	943.4	944.7	948.5	951.1	951.1
5°	938.2	940.8	947.2	951.1	952.4
7.5°	930.5	934.3	943.4	948.5	949.8
10°	918.9	924.0	935.6	943.4	945.9
12.5°	904.7	912.4	926.6	936.9	939.5
15°	886.7	897.0	913.7	926.6	930.5
17.5°	866.0	878.9	899.5	915.0	920.2
20°	844.1	857.0	882.8	900.8	907.3
22.5°	818.4	835.1	864.8	885.4	890.5
25°	791.3	810.6	842.8	866.0	873.8
27.5°	761.7	784.8	819.6	848.0	854.4
30°	730.7	755.2	795.2	826.1	833.8
32.5°	698.5	726.9	769.4	804.2	814.5
35°	666.3	694.6	741.0	779.7	791.3
37.5°	628.9	662.4	714.0	753.9	768.1
40°	596.7	628.9	684.3	728.1	742.3
42.5°	560.6	595.4	653.4	701.1	717.8
45°	524.5	561.9	623.8	674.0	690.8
47.5°	491.0	528.4	592.8	645.7	662.4
50°	456.2	494.9	561.9	616.0	632.8
52.5°	418.8	461.4	531.0	585.1	604.4
55°	385.3	427.9	497.5	554.2	573.5
57.5°	350.5	394.4	466.5	520.7	538.7
60°	318.3	360.8	431.7	484.6	505.2
62.5°	283.5	327.3	396.9	448.5	467.8
65°	251.3	293.8	362.1	412.4	430.4
67.5°	219.1	261.6	326.1	373.7	394.4
70°	186.9	229.4	288.7	335.1	353.1
72.5°	158.5	195.9	252.6	295.1	311.9
75°	127.6	165.0	212.6	250.0	257.7
77.5°	99.2	132.7	172.7	189.4	192.0
80°	73.5	99.2	126.3	130.2	130.2
82.5°	49.0	68.3	78.6	79.9	78.6
85°	29.6	36.1	37.4	32.2	29.6
87.5°	10.3	10.3	6.4	3.9	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)