

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: P388248

Luminaire Tested: **22CZ2-29VHE-UNV-L935-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: P388248
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-29VHE-UNV-L935-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2568.8 lumens
Efficiency: N/A
Efficacy: 118.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

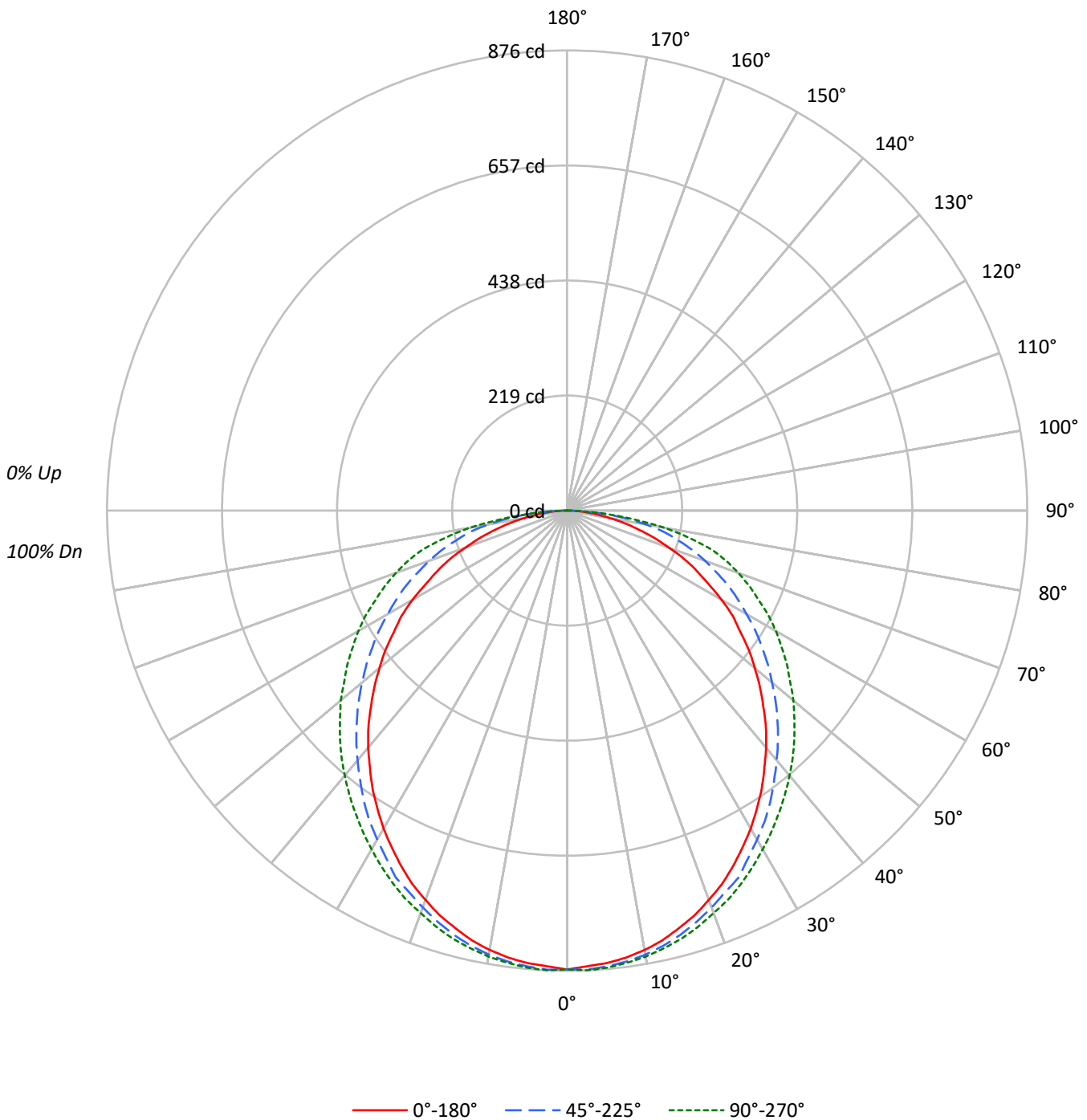
Input Watts (W): 21.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2350	2350	2350
5°	2336	2353	2359
10°	2321	2345	2356
15°	2293	2328	2349
20°	2259	2302	2335
25°	2218	2290	2327
30°	2172	2247	2313
35°	2122	2217	2309
40°	2069	2180	2314
45°	2011	2155	2328
50°	1953	2133	2355
55°	1886	2123	2396
60°	1830	2123	2469
65°	1738	2157	2560
70°	1621	2198	2725
75°	1485	2274	2943
80°	1292	2369	2899
85°	1133	2109	2303



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.6	3.2
10°-20°	235.3	9.2
20°-30°	353.2	13.7
30°-40°	422.0	16.4
40°-50°	438.9	17.1
50°-60°	406.8	15.8
60°-70°	333.6	13.0
70°-80°	225.5	8.8
80°-90°	70.9	2.8
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°	671.1	26.1
0°-40°	1093.1	42.6
0°-60°	1938.8	75.5
0°-90°	2568.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2568.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	873	873	873	873	873	
5°	865	866	871	872	873	82
15°	823	827	836	841	843	232
25°	747	753	771	780	784	344
35°	646	655	675	695	703	404
45°	528	538	566	599	612	408
55°	402	415	452	493	511	361
65°	273	288	339	383	402	270
75°	143	167	219	263	283	151
85°	37	51	68	76	75	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	873.4	873.4	873.4	873.4	873.4
2.5°	868.4	870.9	874.7	876.0	876.0
5°	864.6	865.9	870.9	872.2	873.4
7.5°	858.3	860.8	865.9	867.1	868.4
10°	849.4	852.0	858.3	860.8	862.1
12.5°	838.0	840.6	848.2	852.0	853.2
15°	822.9	826.7	835.5	840.6	843.1
17.5°	807.7	811.5	820.4	827.9	830.5
20°	788.7	797.6	803.9	814.0	815.3
22.5°	769.8	774.8	786.2	796.3	801.4
25°	747.0	753.4	771.1	779.9	783.7
27.5°	723.0	731.9	745.8	759.7	764.7
30°	699.0	705.3	723.0	739.5	744.5
32.5°	672.5	681.3	700.3	716.7	724.3
35°	645.9	654.8	675.0	695.2	702.8
37.5°	616.8	627.0	647.2	671.2	681.3
40°	589.0	596.6	620.6	649.7	658.6
42.5°	560.0	568.8	594.1	625.7	635.8
45°	528.4	538.5	566.3	599.1	611.8
47.5°	498.0	508.1	538.5	571.3	586.5
50°	466.4	479.1	509.4	547.3	562.5
52.5°	436.1	447.5	481.6	520.8	534.7
55°	402.0	414.6	452.5	493.0	510.7
57.5°	374.2	383.0	424.7	466.4	484.1
60°	340.0	351.4	394.4	438.6	458.8
62.5°	303.4	322.3	366.6	412.1	432.3
65°	273.0	288.2	338.8	383.0	402.0
67.5°	241.4	257.9	307.2	353.9	375.4
70°	206.0	227.5	279.3	326.1	346.3
72.5°	174.4	197.2	250.3	295.8	317.3
75°	142.8	166.9	218.7	262.9	283.1
77.5°	112.5	139.0	189.6	223.7	236.4
80°	83.4	108.7	152.9	177.0	187.1
82.5°	58.1	79.6	112.5	125.1	127.7
85°	36.7	50.6	68.3	75.8	74.6
87.5°	16.4	20.2	25.3	27.8	26.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)