

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: P277173

Luminaire Tested: **22CZ2-39HE-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277173
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-39HE-UNV-L83050-W2A1-U-3500K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3670.0 lumens
Efficiency: N/A
Efficacy: 121.8 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

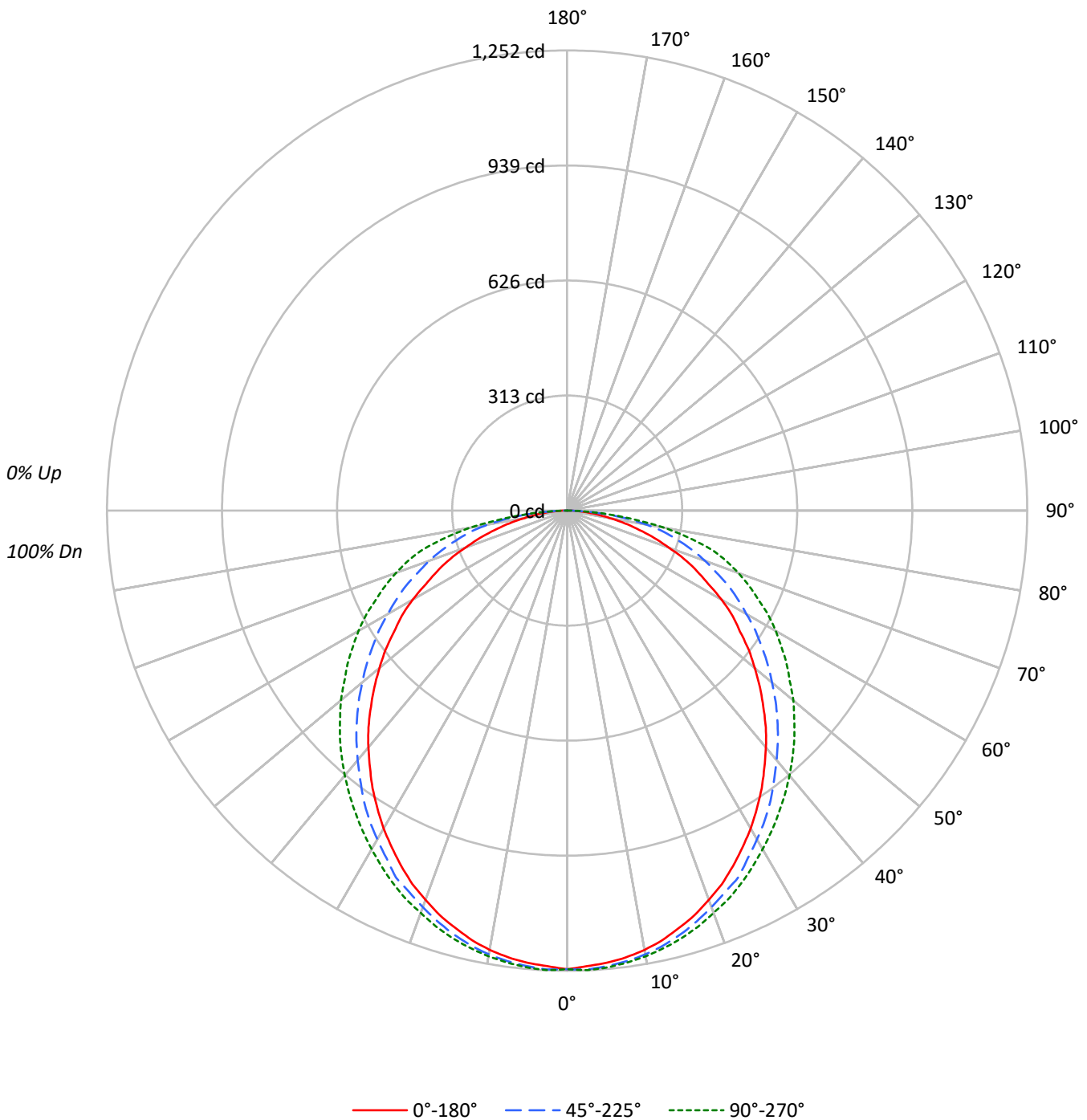
Input Watts (W): 30.132
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3358	3358	3358
5°	3337	3361	3371
10°	3316	3351	3365
15°	3275	3326	3356
20°	3227	3289	3336
25°	3169	3271	3324
30°	3103	3210	3305
35°	3031	3168	3299
40°	2956	3115	3305
45°	2873	3079	3326
50°	2790	3047	3364
55°	2694	3033	3423
60°	2615	3032	3528
65°	2484	3082	3657
70°	2316	3140	3893
75°	2122	3248	4206
80°	1847	3386	4142
85°	1618	3010	3288



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.0	3.2
10°-20°	336.1	9.2
20°-30°	504.6	13.7
30°-40°	603.0	16.4
40°-50°	627.0	17.1
50°-60°	581.1	15.8
60°-70°	476.7	13.0
70°-80°	322.2	8.8
80°-90°	101.3	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°	958.8	26.1
0°-40°	1561.7	42.6
0°-60°	2769.8	75.5
0°-90°	3670.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3670.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1248	1248	1248	1248	1248	
5°	1235	1237	1244	1246	1248	117
15°	1176	1181	1194	1201	1204	332
25°	1067	1076	1102	1114	1120	492
35°	923	935	964	993	1004	577
45°	755	769	809	856	874	583
55°	574	592	646	704	730	516
65°	390	412	484	547	574	386
75°	204	238	312	376	404	216
85°	52	72	98	108	106	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1247.9	1247.9	1247.9	1247.9	1247.9
2.5°	1240.6	1244.3	1249.7	1251.5	1251.5
5°	1235.2	1237.0	1244.3	1246.1	1247.9
7.5°	1226.2	1229.8	1237.0	1238.8	1240.6
10°	1213.6	1217.2	1226.2	1229.8	1231.6
12.5°	1197.3	1200.9	1211.7	1217.2	1219.0
15°	1175.6	1181.0	1193.7	1200.9	1204.5
17.5°	1154.0	1159.4	1172.0	1182.9	1186.5
20°	1126.9	1139.5	1148.5	1163.0	1164.8
22.5°	1099.8	1107.0	1123.3	1137.7	1144.9
25°	1067.3	1076.3	1101.6	1114.2	1119.6
27.5°	1033.0	1045.6	1065.5	1085.3	1092.6
30°	998.7	1007.7	1033.0	1056.4	1063.7
32.5°	960.7	973.4	1000.5	1023.9	1034.8
35°	922.8	935.4	964.3	993.2	1004.1
37.5°	881.3	895.7	924.6	958.9	973.4
40°	841.5	852.4	886.7	928.2	940.9
42.5°	800.0	812.6	848.8	893.9	908.4
45°	754.9	769.3	809.0	856.0	874.0
47.5°	711.5	726.0	769.3	816.3	837.9
50°	666.4	684.4	727.8	781.9	803.6
52.5°	623.0	639.3	688.0	744.0	763.9
55°	574.3	592.3	646.5	704.3	729.6
57.5°	534.5	547.2	606.8	666.4	691.7
60°	485.8	502.0	563.4	626.6	655.5
62.5°	433.4	460.5	523.7	588.7	617.6
65°	390.1	411.7	484.0	547.2	574.3
67.5°	344.9	368.4	438.8	505.6	536.3
70°	294.4	325.1	399.1	465.9	494.8
72.5°	249.2	281.7	357.6	422.6	453.3
75°	204.1	238.4	312.4	375.6	404.5
77.5°	160.7	198.6	270.9	319.6	337.7
80°	119.2	155.3	218.5	252.8	267.3
82.5°	83.1	113.8	160.7	178.8	182.4
85°	52.4	72.2	97.5	108.4	106.5
87.5°	23.5	28.9	36.1	39.7	37.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)