

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: P230549

Luminaire Tested: **22CZ-LD5-39-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230549
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25706)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-39-UNV-L935-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH RIBBED LENS
Light Source: (84) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3385.0 lumens
Efficiency: N/A
Efficacy: 93.0 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

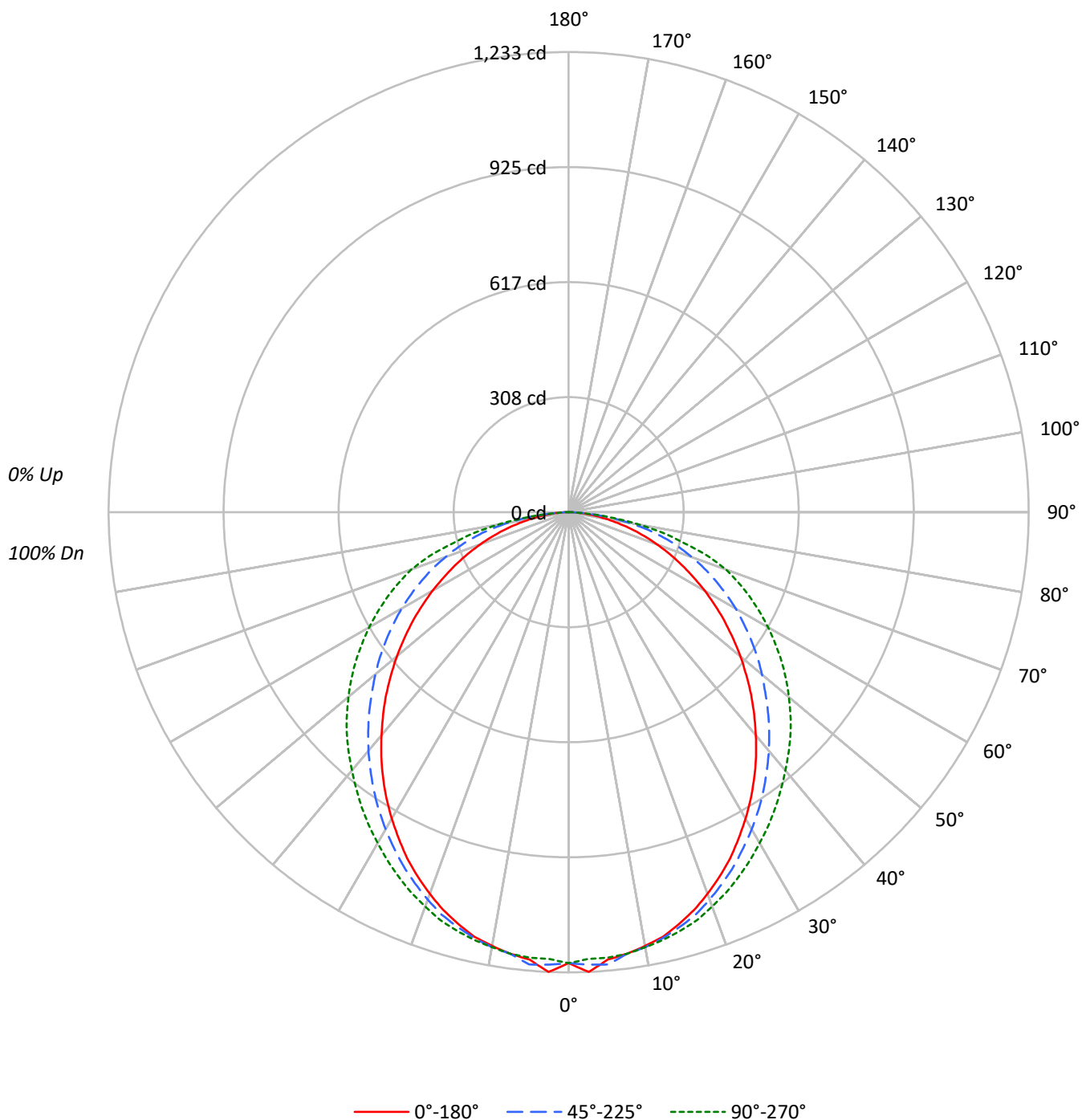
Input Watts (W): 36.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	108	104	99	95	106	101	97	94	97	94	91		93	90	88		83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		69
3	90	79	70	64	87	77	69	63	74	68	62		71	66	61		58
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		43
6	70	56	47	41	68	55	47	40	53	46	40		52	45	40		37
7	65	51	42	36	63	50	42	36	48	41	35		47	40	35		33
8	60	46	38	32	58	46	38	32	44	37	32		43	36	31		29
9	56	43	34	29	55	42	34	29	41	34	29		40	33	28		26
10	53	39	31	26	51	39	31	26	38	31	26		37	30	26		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3251	3251	3251
5°	3250	3286	3237
10°	3225	3234	3234
15°	3183	3205	3233
20°	3116	3163	3220
25°	3040	3108	3201
30°	2946	3049	3182
35°	2850	2990	3174
40°	2741	2932	3175
45°	2631	2875	3201
50°	2515	2832	3225
55°	2394	2803	3267
60°	2268	2782	3322
65°	2128	2767	3407
70°	1981	2758	3522
75°	1797	2755	3337
80°	1556	2551	2958
85°	1321	1933	1880



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.6	3.4
10°-20°	324.6	9.6
20°-30°	482.9	14.3
30°-40°	571.1	16.9
40°-50°	587.0	17.3
50°-60°	536.4	15.8
60°-70°	429.1	12.7
70°-80°	269.3	8.0
80°-90°	70.1	2.1
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°	922.1	27.2
0°-40°	1493.2	44.1
0°-60°	2616.5	77.3
0°-90°	3385.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3385.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1208	1208	1208	1208	1208	
5°	1203	1203	1216	1208	1198	114
15°	1142	1144	1151	1157	1160	322
25°	1024	1030	1047	1065	1078	471
35°	868	879	910	945	966	542
45°	691	710	756	812	841	533
55°	510	535	598	663	696	456
65°	334	364	435	500	535	332
75°	173	206	265	304	321	184
85°	43	54	63	61	61	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1208.2	1208.2	1208.2	1208.2	1208.2
2.5°	1232.9	1228.0	1213.2	1203.3	1198.3
5°	1203.3	1203.3	1216.5	1208.2	1198.3
7.5°	1193.4	1193.4	1193.4	1218.1	1193.4
10°	1180.2	1181.9	1183.5	1193.4	1183.5
12.5°	1165.4	1165.4	1168.7	1172.0	1173.7
15°	1142.4	1144.0	1150.6	1157.2	1160.5
17.5°	1117.7	1122.6	1130.9	1139.1	1145.7
20°	1088.1	1094.6	1104.5	1117.7	1124.3
22.5°	1056.8	1063.4	1076.5	1091.3	1102.9
25°	1023.9	1030.4	1046.9	1065.0	1078.2
27.5°	986.0	994.2	1014.0	1038.7	1051.8
30°	948.1	958.0	981.1	1009.0	1023.9
32.5°	908.6	920.2	946.5	977.8	995.9
35°	867.5	879.0	910.3	944.8	966.2
37.5°	824.7	837.9	872.4	911.9	935.0
40°	780.2	795.1	834.6	877.4	903.7
42.5°	735.8	752.3	795.1	846.1	872.4
45°	691.4	709.5	755.5	811.5	841.1
47.5°	645.3	666.7	714.4	776.9	806.6
50°	600.8	622.2	676.5	740.7	770.4
52.5°	554.7	579.4	637.0	702.9	734.2
55°	510.3	535.0	597.5	663.4	696.3
57.5°	465.8	490.5	556.4	623.9	656.8
60°	421.4	447.7	516.9	582.7	617.3
62.5°	377.0	404.9	475.7	543.2	576.1
65°	334.2	363.8	434.6	500.4	535.0
67.5°	293.0	324.3	393.4	457.6	492.2
70°	251.8	283.1	350.6	413.2	447.7
72.5°	212.3	243.6	309.5	365.4	391.8
75°	172.8	205.8	265.0	304.5	321.0
77.5°	135.0	167.9	218.9	245.3	263.4
80°	100.4	128.4	164.6	184.4	190.9
82.5°	69.1	92.2	115.2	120.2	123.5
85°	42.8	54.3	62.6	60.9	60.9
87.5°	19.8	21.4	18.1	13.2	8.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)