

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: P230552

Luminaire Tested: **22CZ-LD5-44-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230552
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-LD5-44-UNV-L930-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH RIBBED LENS
Light Source: (84) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3672.0 lumens
Efficiency: N/A
Efficacy: 87.8 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

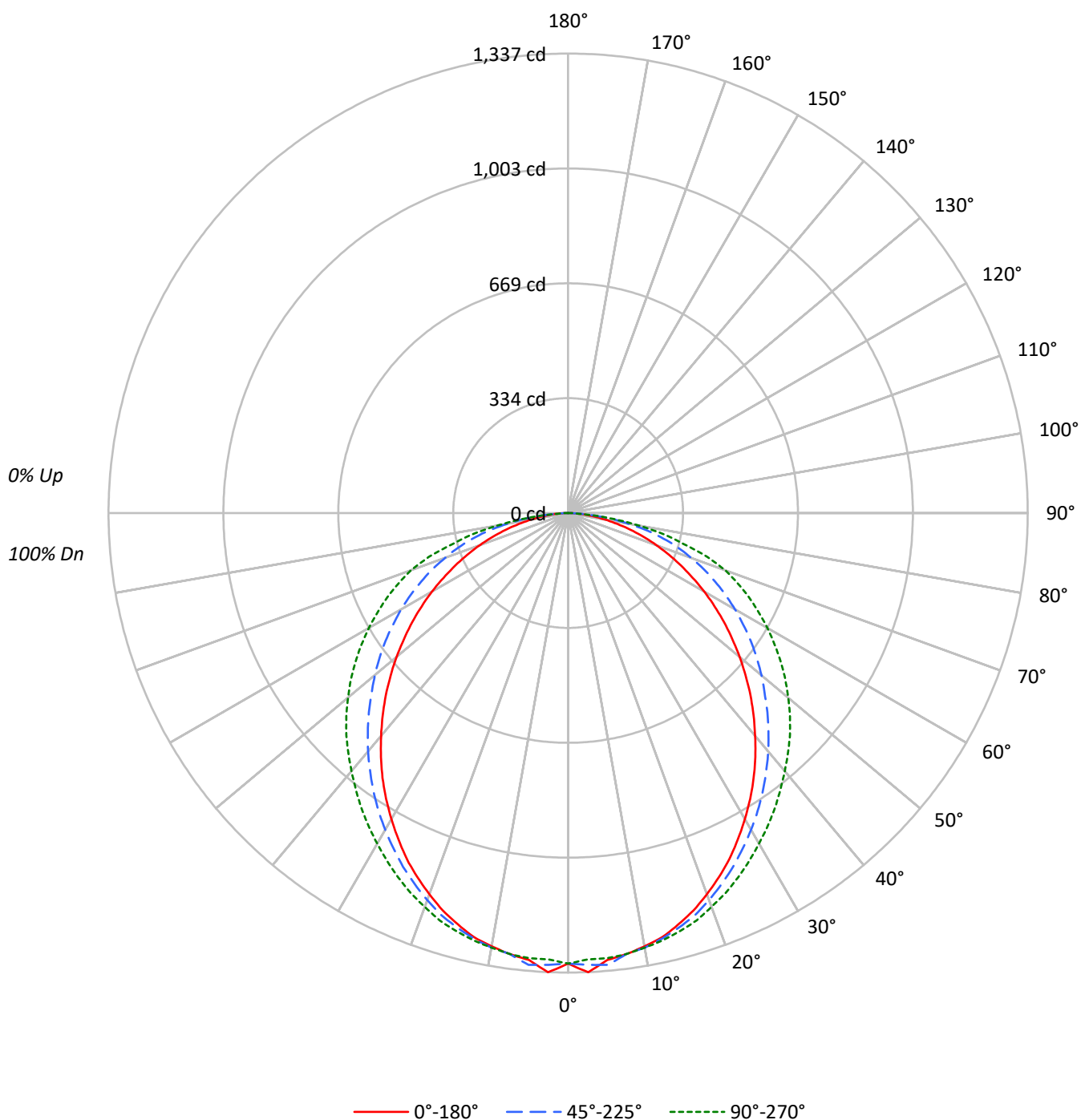
Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3527	3527	3527
5°	3526	3565	3511
10°	3498	3508	3508
15°	3452	3477	3507
20°	3380	3431	3493
25°	3298	3372	3473
30°	3196	3307	3451
35°	3091	3244	3443
40°	2973	3180	3444
45°	2854	3119	3473
50°	2729	3072	3499
55°	2597	3041	3544
60°	2460	3018	3604
65°	2308	3002	3695
70°	2150	2992	3821
75°	1949	2989	3620
80°	1688	2768	3209
85°	1433	2096	2041



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.3	3.4
10°-20°	352.1	9.6
20°-30°	523.8	14.3
30°-40°	619.5	16.9
40°-50°	636.8	17.3
50°-60°	581.8	15.8
60°-70°	465.5	12.7
70°-80°	292.1	8.0
80°-90°	76.1	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°	1000.2	27.2
0°-40°	1619.8	44.1
0°-60°	2838.4	77.3
0°-90°	3672.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3672.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1311	1311	1311	1311	1311	
5°	1305	1305	1320	1311	1300	124
15°	1239	1241	1248	1255	1259	349
25°	1111	1118	1136	1155	1170	511
35°	941	954	988	1025	1048	588
45°	750	770	820	880	912	578
55°	554	580	648	720	755	495
65°	362	395	471	543	580	360
75°	188	223	288	330	348	199
85°	46	59	68	66	66	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1310.7	1310.7	1310.7	1310.7	1310.7
2.5°	1337.4	1332.1	1316.0	1305.3	1299.9
5°	1305.3	1305.3	1319.6	1310.7	1299.9
7.5°	1294.6	1294.6	1294.6	1321.4	1294.6
10°	1280.3	1282.1	1283.9	1294.6	1283.9
12.5°	1264.2	1264.2	1267.8	1271.4	1273.2
15°	1239.2	1241.0	1248.2	1255.3	1258.9
17.5°	1212.5	1217.8	1226.7	1235.7	1242.8
20°	1180.3	1187.5	1198.2	1212.5	1219.6
22.5°	1146.4	1153.5	1167.8	1183.9	1196.4
25°	1110.7	1117.8	1135.7	1155.3	1169.6
27.5°	1069.6	1078.5	1100.0	1126.7	1141.0
30°	1028.5	1039.2	1064.2	1094.6	1110.7
32.5°	985.7	998.2	1026.7	1060.7	1080.3
35°	941.0	953.5	987.5	1025.0	1048.2
37.5°	894.6	908.9	946.4	989.2	1014.2
40°	846.4	862.5	905.3	951.7	980.3
42.5°	798.2	816.0	862.5	917.8	946.4
45°	750.0	769.6	819.6	880.3	912.5
47.5°	700.0	723.2	775.0	842.8	875.0
50°	651.8	675.0	733.9	803.5	835.7
52.5°	601.8	628.5	691.0	762.5	796.4
55°	553.5	580.3	648.2	719.6	755.3
57.5°	505.3	532.1	603.5	676.8	712.5
60°	457.1	485.7	560.7	632.1	669.6
62.5°	408.9	439.3	516.1	589.3	625.0
65°	362.5	394.6	471.4	542.8	580.3
67.5°	317.8	351.8	426.8	496.4	533.9
70°	273.2	307.1	380.3	448.2	485.7
72.5°	230.3	264.3	335.7	396.4	425.0
75°	187.5	223.2	287.5	330.3	348.2
77.5°	146.4	182.1	237.5	266.1	285.7
80°	108.9	139.3	178.6	200.0	207.1
82.5°	75.0	100.0	125.0	130.4	133.9
85°	46.4	58.9	67.9	66.1	66.1
87.5°	21.4	23.2	19.6	14.3	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)