

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: P230548

Luminaire Tested: **22CZ-LD5-39-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230548
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-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: 3257.0 lumens
Efficiency: N/A
Efficacy: 89.5 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

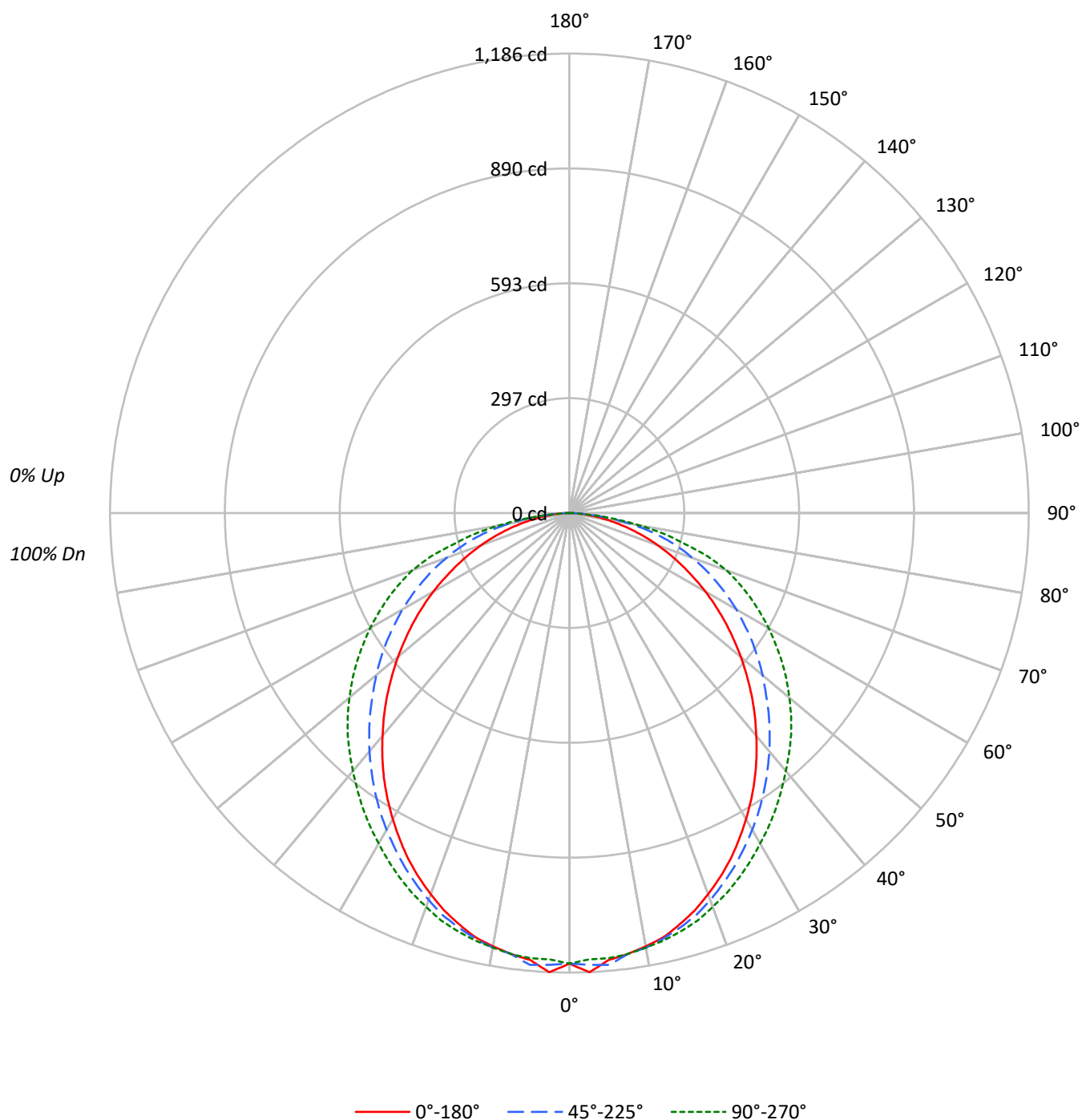
Input Watts (W): 36.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					10
RW	70	50	30	10	70	50	30	10	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	100		
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83		
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69		
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58		
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49		
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43		
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37		
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33		
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29		
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26		
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3128	3128	3128
5°	3128	3162	3115
10°	3103	3112	3112
15°	3062	3084	3111
20°	2998	3044	3098
25°	2925	2991	3080
30°	2835	2933	3061
35°	2742	2877	3054
40°	2637	2821	3054
45°	2531	2767	3080
50°	2420	2725	3103
55°	2304	2697	3143
60°	2182	2676	3196
65°	2047	2662	3277
70°	1906	2655	3389
75°	1729	2651	3211
80°	1497	2455	2847
85°	1272	1859	1809



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.3	3.4
10°-20°	312.3	9.6
20°-30°	464.6	14.3
30°-40°	549.5	16.9
40°-50°	564.8	17.3
50°-60°	516.1	15.8
60°-70°	412.8	12.7
70°-80°	259.1	8.0
80°-90°	67.5	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°	887.2	27.2
0°-40°	1436.7	44.1
0°-60°	2517.6	77.3
0°-90°	3257.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3257.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1162	1162	1162	1162	1162	
5°	1158	1158	1170	1162	1153	110
15°	1099	1101	1107	1113	1117	310
25°	985	992	1007	1025	1037	453
35°	835	846	876	909	930	522
45°	665	683	727	781	809	513
55°	491	515	575	638	670	439
65°	322	350	418	482	515	319
75°	166	198	255	293	309	177
85°	41	52	60	59	59	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1162.5	1162.5	1162.5	1162.5	1162.5
2.5°	1186.3	1181.5	1167.3	1157.8	1153.0
5°	1157.8	1157.8	1170.5	1162.5	1153.0
7.5°	1148.3	1148.3	1148.3	1172.0	1148.3
10°	1135.6	1137.2	1138.8	1148.3	1138.8
12.5°	1121.4	1121.4	1124.5	1127.7	1129.3
15°	1099.2	1100.8	1107.1	1113.4	1116.6
17.5°	1075.4	1080.2	1088.1	1096.0	1102.3
20°	1046.9	1053.2	1062.8	1075.4	1081.8
22.5°	1016.8	1023.2	1035.8	1050.1	1061.2
25°	985.1	991.5	1007.3	1024.7	1037.4
27.5°	948.7	956.6	975.6	999.4	1012.1
30°	912.3	921.8	944.0	970.9	985.1
32.5°	874.3	885.4	910.7	940.8	958.2
35°	834.7	845.8	875.9	909.1	929.7
37.5°	793.5	806.2	839.4	877.4	899.6
40°	750.7	765.0	803.0	844.2	869.5
42.5°	708.0	723.8	765.0	814.1	839.4
45°	665.2	682.6	727.0	780.8	809.3
47.5°	620.9	641.5	687.4	747.6	776.1
50°	578.1	598.7	651.0	712.7	741.2
52.5°	533.8	557.5	612.9	676.3	706.4
55°	491.0	514.7	574.9	638.3	670.0
57.5°	448.2	472.0	535.3	600.3	631.9
60°	405.5	430.8	497.3	560.7	593.9
62.5°	362.7	389.6	457.7	522.7	554.3
65°	321.5	350.0	418.1	481.5	514.7
67.5°	281.9	312.0	378.5	440.3	473.6
70°	242.3	272.4	337.4	397.5	430.8
72.5°	204.3	234.4	297.8	351.6	377.0
75°	166.3	198.0	255.0	293.0	308.8
77.5°	129.9	161.6	210.6	236.0	253.4
80°	96.6	123.5	158.4	177.4	183.7
82.5°	66.5	88.7	110.9	115.6	118.8
85°	41.2	52.3	60.2	58.6	58.6
87.5°	19.0	20.6	17.4	12.7	7.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)