

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: P230569

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230569
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-LD5-39SE-UNV-L935-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH RIBBED LENS
Light Source: (56) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3410.0 lumens
Efficiency: N/A
Efficacy: 97.7 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

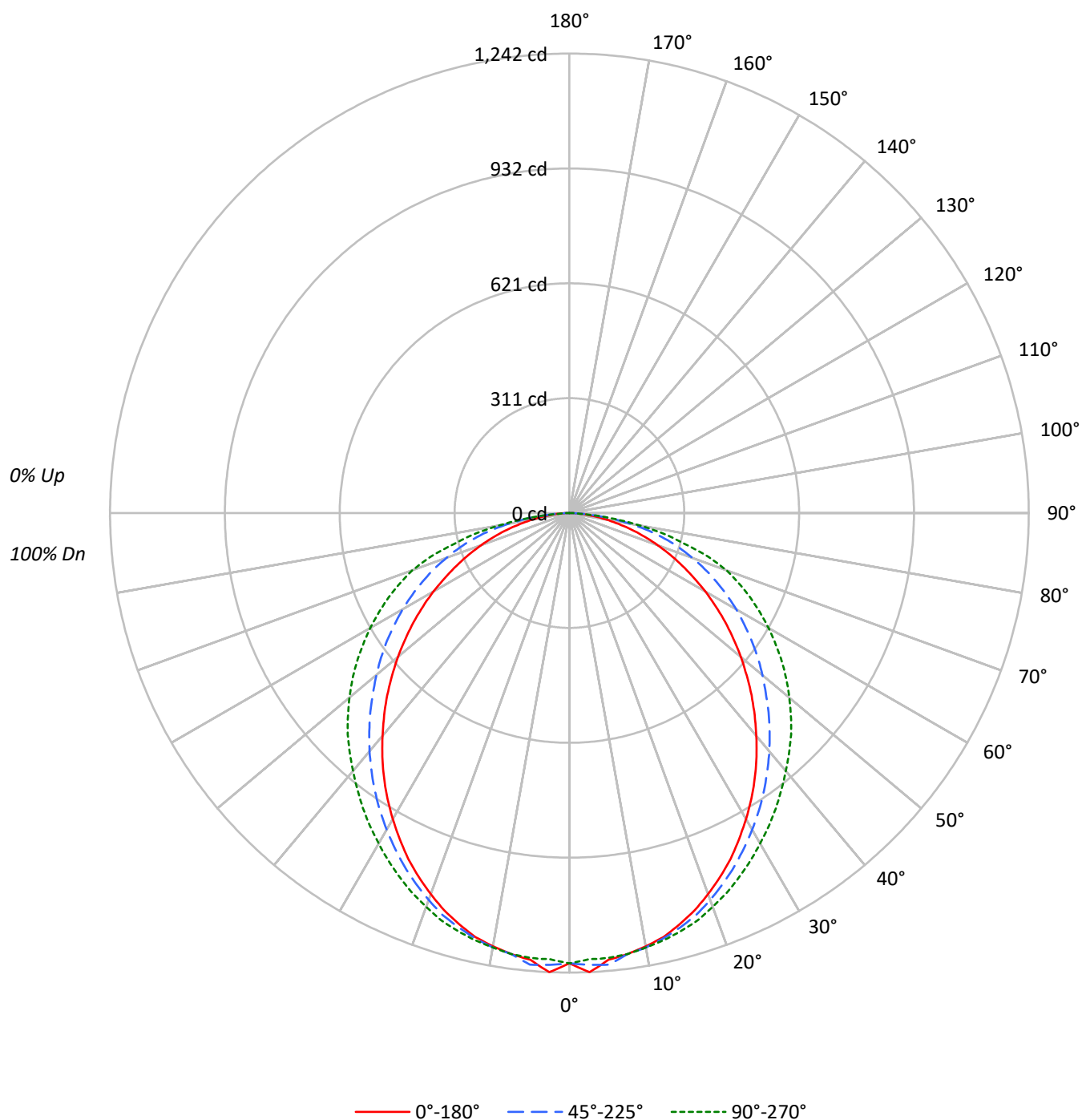
Input Watts (W): 34.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	108	104	99	95	106	101	97	94		97	94	91		93	90	88		89	87	85
2	98	90	83	77	96	88	82	76		84	79	74		81	77	73		78	74	71
3	90	79	70	64	87	77	69	63		74	68	62		71	66	61		69	64	60
4	82	70	61	54	80	68	60	54		66	59	53		64	57	52		61	56	51
5	75	62	53	46	73	61	53	46		59	51	46		57	50	45		55	49	45
6	70	56	47	41	68	55	47	40		53	46	40		52	45	40		50	44	39
7	65	51	42	36	63	50	42	36		48	41	35		47	40	35		46	40	35
8	60	46	38	32	58	46	38	32		44	37	32		43	36	31		42	36	31
9	56	43	34	29	55	42	34	29		41	34	29		40	33	28		39	33	28
10	53	39	31	26	51	39	31	26		38	31	26		37	30	26		36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3275	3275	3275
5°	3274	3310	3261
10°	3249	3258	3258
15°	3206	3229	3257
20°	3139	3186	3243
25°	3062	3131	3225
30°	2968	3071	3205
35°	2871	3012	3198
40°	2761	2953	3198
45°	2651	2896	3225
50°	2534	2853	3249
55°	2412	2824	3291
60°	2285	2802	3347
65°	2143	2788	3431
70°	1996	2779	3548
75°	1810	2776	3362
80°	1568	2569	2982
85°	1331	1945	1896



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.4	3.4
10°-20°	327.0	9.6
20°-30°	486.4	14.3
30°-40°	575.3	16.9
40°-50°	591.3	17.3
50°-60°	540.3	15.8
60°-70°	432.2	12.7
70°-80°	271.3	8.0
80°-90°	70.7	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°	928.9	27.2
0°-40°	1504.2	44.1
0°-60°	2635.8	77.3
0°-90°	3410.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3410.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1217	1217	1217	1217	1217	
5°	1212	1212	1225	1217	1207	115
15°	1151	1152	1159	1166	1169	324
25°	1031	1038	1055	1073	1086	474
35°	874	886	917	952	973	546
45°	696	715	761	818	847	537
55°	514	539	602	668	701	460
65°	337	366	438	504	539	334
75°	174	207	267	307	323	185
85°	43	55	63	61	61	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1217.1	1217.1	1217.1	1217.1	1217.1
2.5°	1242.0	1237.0	1222.1	1212.2	1207.2
5°	1212.2	1212.2	1225.4	1217.1	1207.2
7.5°	1202.2	1202.2	1202.2	1227.1	1202.2
10°	1189.0	1190.6	1192.3	1202.2	1192.3
12.5°	1174.0	1174.0	1177.3	1180.7	1182.3
15°	1150.8	1152.5	1159.1	1165.7	1169.1
17.5°	1125.9	1130.9	1139.2	1147.5	1154.1
20°	1096.1	1102.7	1112.7	1125.9	1132.6
22.5°	1064.6	1071.2	1084.5	1099.4	1111.0
25°	1031.4	1038.1	1054.6	1072.9	1086.1
27.5°	993.3	1001.6	1021.5	1046.3	1059.6
30°	955.1	965.1	988.3	1016.5	1031.4
32.5°	915.3	927.0	953.5	985.0	1003.2
35°	873.9	885.5	917.0	951.8	973.4
37.5°	830.8	844.0	878.9	918.7	941.9
40°	786.0	800.9	840.7	883.8	910.4
42.5°	741.2	757.8	800.9	852.3	878.9
45°	696.5	714.7	761.1	817.5	847.4
47.5°	650.0	671.6	719.7	782.7	812.5
50°	605.3	626.8	681.5	746.2	776.1
52.5°	558.8	583.7	641.7	708.1	739.6
55°	514.1	538.9	601.9	668.3	701.4
57.5°	469.3	494.2	560.5	628.5	661.6
60°	424.5	451.0	520.7	587.0	621.8
62.5°	379.7	407.9	479.2	547.2	580.4
65°	336.6	366.5	437.8	504.1	538.9
67.5°	295.2	326.7	396.3	461.0	495.8
70°	253.7	285.2	353.2	416.2	451.0
72.5°	213.9	245.4	311.7	368.1	394.7
75°	174.1	207.3	267.0	306.8	323.4
77.5°	136.0	169.1	220.5	247.1	265.3
80°	101.2	129.3	165.8	185.7	192.4
82.5°	69.6	92.9	116.1	121.1	124.4
85°	43.1	54.7	63.0	61.4	61.4
87.5°	19.9	21.6	18.2	13.3	8.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)