

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: P230568

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230568
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-L930-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH RIBBED LENS
Light Source: (56) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3280.0 lumens
Efficiency: N/A
Efficacy: 94.0 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

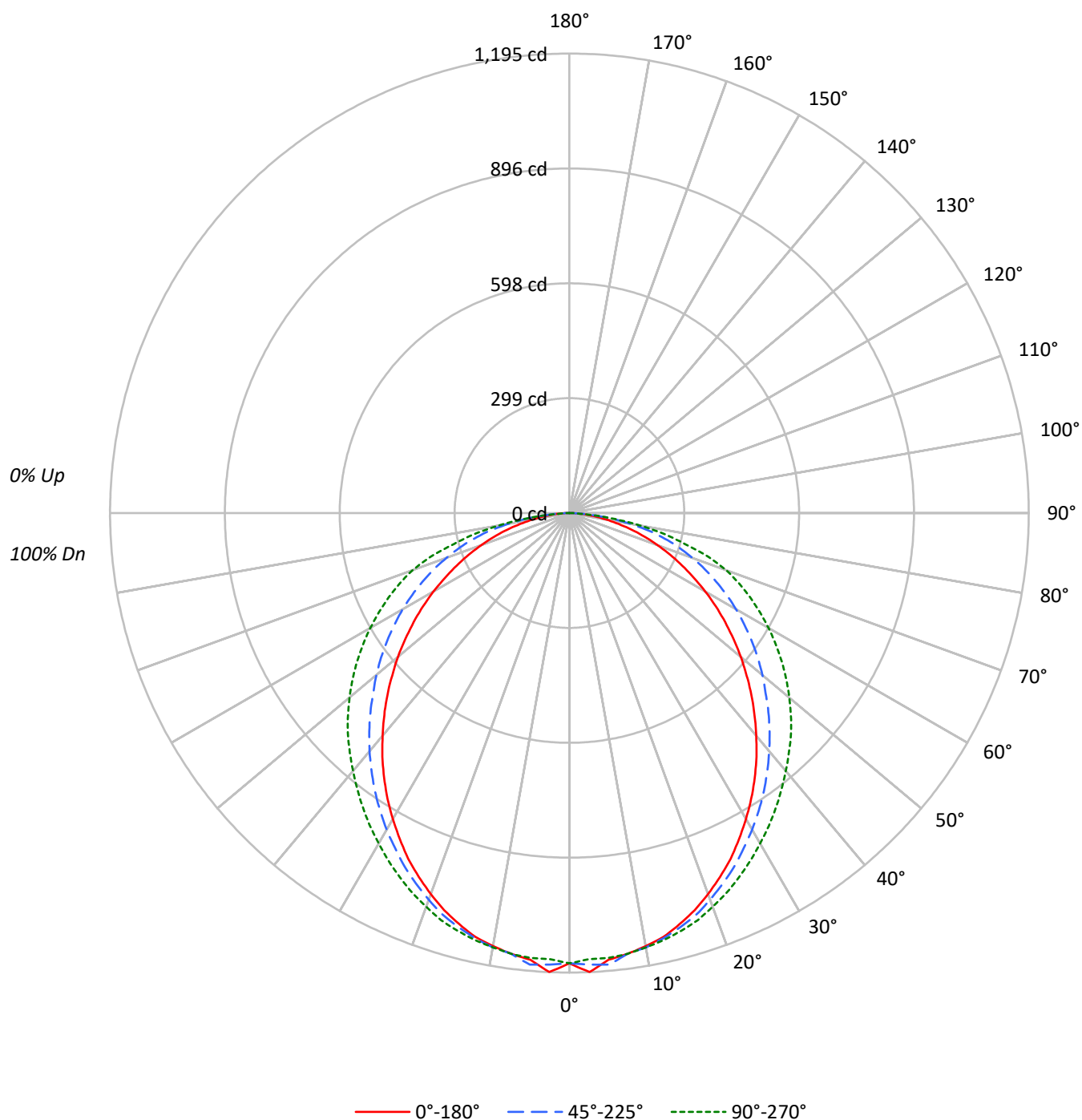
Input Watts (W): 34.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
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°	3150	3150	3150
5°	3150	3184	3137
10°	3125	3134	3134
15°	3084	3106	3133
20°	3019	3065	3120
25°	2946	3012	3102
30°	2855	2954	3083
35°	2761	2897	3076
40°	2656	2841	3076
45°	2549	2786	3102
50°	2437	2745	3125
55°	2320	2716	3165
60°	2197	2695	3219
65°	2062	2681	3301
70°	1920	2673	3413
75°	1742	2670	3234
80°	1508	2472	2867
85°	1281	1871	1822



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.0	3.4
10°-20°	314.5	9.6
20°-30°	467.9	14.3
30°-40°	553.4	16.9
40°-50°	568.8	17.3
50°-60°	519.7	15.8
60°-70°	415.8	12.7
70°-80°	260.9	8.0
80°-90°	67.9	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°	893.5	27.2
0°-40°	1446.8	44.1
0°-60°	2535.3	77.3
0°-90°	3280.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3280.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1171	1171	1171	1171	1171	
5°	1166	1166	1179	1171	1161	111
15°	1107	1108	1115	1121	1124	312
25°	992	998	1014	1032	1045	456
35°	841	852	882	916	936	525
45°	670	688	732	786	815	516
55°	494	518	579	643	675	442
65°	324	352	421	485	518	321
75°	168	199	257	295	311	178
85°	42	53	61	59	59	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1170.7	1170.7	1170.7	1170.7	1170.7
2.5°	1194.7	1189.9	1175.5	1166.0	1161.2
5°	1166.0	1166.0	1178.7	1170.7	1161.2
7.5°	1156.4	1156.4	1156.4	1180.3	1156.4
10°	1143.6	1145.2	1146.8	1156.4	1146.8
12.5°	1129.3	1129.3	1132.5	1135.7	1137.2
15°	1106.9	1108.5	1114.9	1121.3	1124.5
17.5°	1083.0	1087.8	1095.8	1103.8	1110.1
20°	1054.3	1060.7	1070.3	1083.0	1089.4
22.5°	1024.0	1030.4	1043.1	1057.5	1068.7
25°	992.1	998.5	1014.4	1032.0	1044.7
27.5°	955.4	963.4	982.5	1006.5	1019.2
30°	918.7	928.3	950.6	977.7	992.1
32.5°	880.4	891.6	917.1	947.4	965.0
35°	840.6	851.7	882.0	915.5	936.3
37.5°	799.1	811.9	845.4	883.6	906.0
40°	756.0	770.4	808.7	850.1	875.7
42.5°	713.0	728.9	770.4	819.8	845.4
45°	669.9	687.5	732.1	786.3	815.1
47.5°	625.2	646.0	692.2	752.8	781.6
50°	582.2	602.9	655.6	717.8	746.5
52.5°	537.5	561.4	617.3	681.1	711.4
55°	494.5	518.4	579.0	642.8	674.7
57.5°	451.4	475.3	539.1	604.5	636.4
60°	408.3	433.8	500.8	564.6	598.1
62.5°	365.3	392.4	461.0	526.4	558.3
65°	323.8	352.5	421.1	484.9	518.4
67.5°	283.9	314.2	381.2	443.4	476.9
70°	244.0	274.3	339.7	400.3	433.8
72.5°	205.8	236.1	299.9	354.1	379.6
75°	167.5	199.4	256.8	295.1	311.0
77.5°	130.8	162.7	212.1	237.7	255.2
80°	97.3	124.4	159.5	178.6	185.0
82.5°	67.0	89.3	111.7	116.4	119.6
85°	41.5	52.6	60.6	59.0	59.0
87.5°	19.1	20.7	17.5	12.8	8.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)