

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: P230570

Luminaire Tested: **22CZ-LD5-39SE-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230570
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-L940-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH RIBBED LENS
Light Source: (56) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3494.0 lumens
Efficiency: N/A
Efficacy: 100.1 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

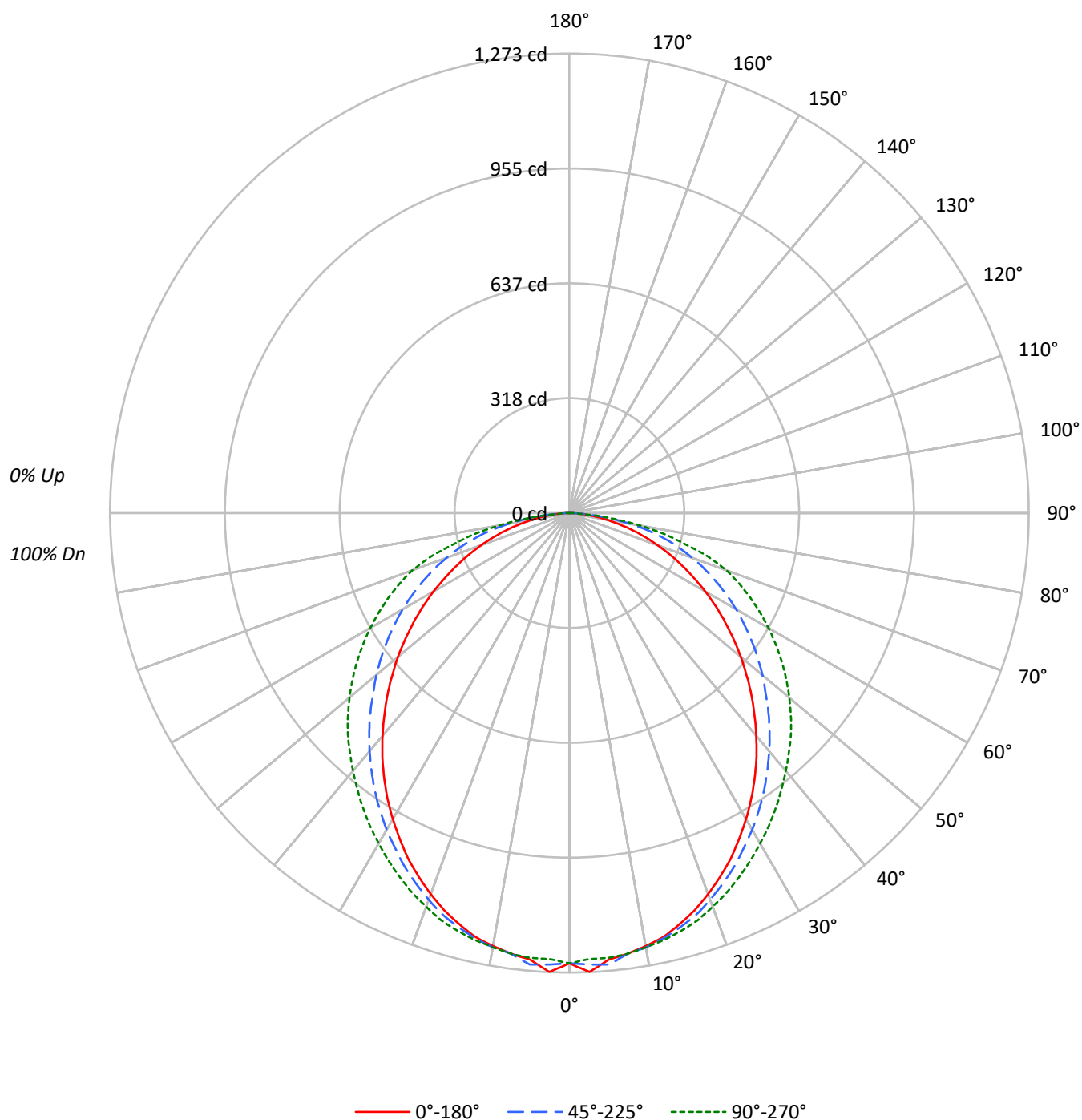
Input Watts (W): 34.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3356	3356	3356
5°	3355	3392	3341
10°	3329	3338	3338
15°	3285	3309	3337
20°	3216	3265	3323
25°	3138	3208	3304
30°	3041	3147	3284
35°	2941	3087	3277
40°	2829	3026	3277
45°	2716	2968	3304
50°	2596	2923	3329
55°	2471	2894	3372
60°	2341	2871	3429
65°	2196	2856	3516
70°	2046	2847	3637
75°	1855	2845	3445
80°	1605	2633	3054
85°	1365	1995	1942



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.3	3.4
10°-20°	335.1	9.6
20°-30°	498.4	14.3
30°-40°	589.5	16.9
40°-50°	605.9	17.3
50°-60°	553.6	15.8
60°-70°	442.9	12.7
70°-80°	278.0	8.0
80°-90°	72.4	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°	951.8	27.2
0°-40°	1541.2	44.1
0°-60°	2700.8	77.3
0°-90°	3494.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3494.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1247	1247	1247	1247	1247	
5°	1242	1242	1256	1247	1237	118
15°	1179	1181	1188	1194	1198	332
25°	1057	1064	1081	1099	1113	486
35°	895	907	940	975	997	560
45°	714	732	780	838	868	550
55°	527	552	617	685	719	471
65°	345	376	449	516	552	342
75°	178	212	274	314	331	189
85°	44	56	65	63	63	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1247.1	1247.1	1247.1	1247.1	1247.1
2.5°	1272.6	1267.5	1252.2	1242.0	1236.9
5°	1242.0	1242.0	1255.6	1247.1	1236.9
7.5°	1231.8	1231.8	1231.8	1257.3	1231.8
10°	1218.2	1219.9	1221.6	1231.8	1221.6
12.5°	1203.0	1203.0	1206.3	1209.7	1211.4
15°	1179.2	1180.9	1187.7	1194.5	1197.9
17.5°	1153.7	1158.8	1167.3	1175.8	1182.6
20°	1123.1	1129.9	1140.1	1153.7	1160.5
22.5°	1090.8	1097.6	1111.2	1126.5	1138.4
25°	1056.8	1063.6	1080.6	1099.3	1112.9
27.5°	1017.8	1026.2	1046.6	1072.1	1085.7
30°	978.7	988.9	1012.7	1041.5	1056.8
32.5°	937.9	949.8	977.0	1009.3	1027.9
35°	895.4	907.3	939.6	975.3	997.4
37.5°	851.2	864.8	900.5	941.3	965.1
40°	805.4	820.7	861.4	905.6	932.8
42.5°	759.5	776.5	820.7	873.3	900.5
45°	713.6	732.3	779.9	837.6	868.2
47.5°	666.0	688.1	737.4	802.0	832.6
50°	620.2	642.3	698.3	764.6	795.2
52.5°	572.6	598.1	657.5	725.5	757.8
55°	526.7	552.2	616.8	684.7	718.7
57.5°	480.8	506.3	574.3	644.0	677.9
60°	435.0	462.2	533.5	601.5	637.2
62.5°	389.1	418.0	491.0	560.7	594.7
65°	344.9	375.5	448.6	516.5	552.2
67.5°	302.4	334.7	406.1	472.3	508.0
70°	260.0	292.2	361.9	426.5	462.2
72.5°	219.2	251.5	319.4	377.2	404.4
75°	178.4	212.4	273.6	314.3	331.3
77.5°	139.3	173.3	226.0	253.2	271.9
80°	103.6	132.5	169.9	190.3	197.1
82.5°	71.4	95.1	118.9	124.0	127.4
85°	44.2	56.1	64.6	62.9	62.9
87.5°	20.4	22.1	18.7	13.6	8.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)