

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: P259428

Luminaire Tested: **22CZ-LD5-39-S-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259428
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25712)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-39-S-UNV-L93050-W2A1-U-4000K
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3687.0 lumens
Efficiency: N/A
Efficacy: 119.3 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

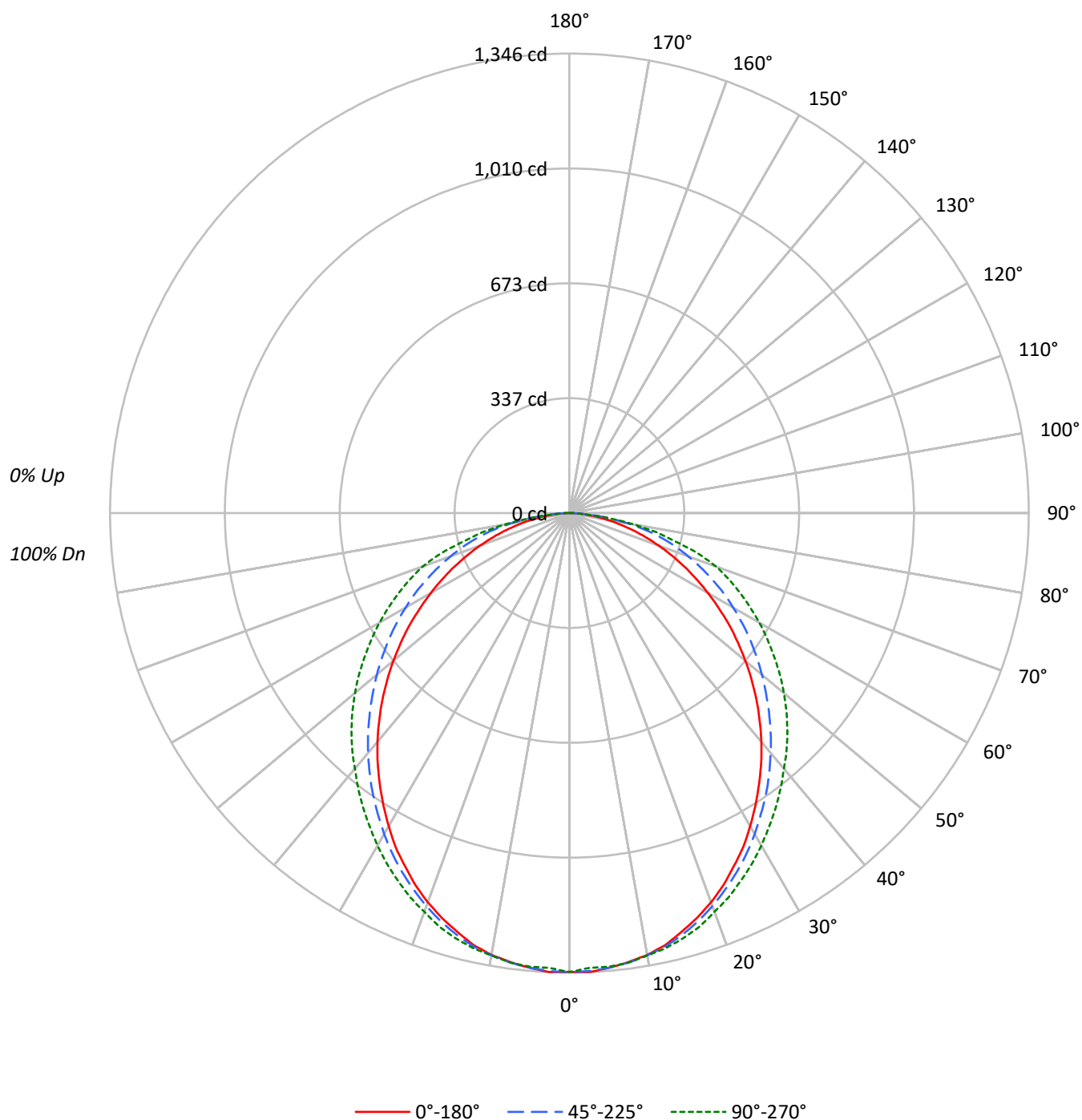
Input Watts (W): 30.915432
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83		
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69		
3	90	79	71	64	87	78	70	64	75	68	63	72	66	62	69	64	60	58		
4	82	70	61	54	80	69	61	54	66	59	53	64	58	53	62	56	52	50		
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43		
6	70	56	47	41	68	56	47	41	54	46	40	52	45	40	50	44	40	38		
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33		
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30		
9	56	43	35	29	55	42	34	29	41	34	29	40	34	29	39	33	29	27		
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3617	3617	3617
5°	3612	3612	3602
10°	3590	3595	3595
15°	3538	3562	3592
20°	3474	3509	3560
25°	3386	3444	3528
30°	3291	3373	3494
35°	3182	3299	3461
40°	3073	3222	3434
45°	2952	3147	3437
50°	2817	3084	3432
55°	2684	3033	3431
60°	2526	2983	3460
65°	2368	2943	3507
70°	2187	2912	3595
75°	1970	2890	3332
80°	1729	2690	2909
85°	1420	2022	1803



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.9	3.4
10°-20°	360.6	9.8
20°-30°	535.6	14.5
30°-40°	630.4	17.1
40°-50°	642.7	17.4
50°-60°	579.6	15.7
60°-70°	456.6	12.4
70°-80°	281.6	7.6
80°-90°	73.1	2.0
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°	1023.1	27.7
0°-40°	1653.4	44.8
0°-60°	2875.7	78.0
0°-90°	3687.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3687.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1344	1344	1344	1344	1344	
5°	1337	1339	1337	1335	1334	127
15°	1270	1275	1279	1286	1289	358
25°	1140	1148	1160	1179	1188	526
35°	969	979	1004	1036	1054	606
45°	776	788	827	877	903	598
55°	572	592	646	705	731	510
65°	372	398	462	521	551	368
75°	190	221	278	310	320	202
85°	46	58	66	62	58	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1344.1	1344.1	1344.1	1344.1	1344.1
2.5°	1345.9	1345.9	1342.4	1338.8	1333.5
5°	1337.0	1338.8	1337.0	1335.3	1333.5
7.5°	1326.4	1328.2	1328.2	1328.2	1328.2
10°	1314.0	1315.8	1315.8	1315.8	1315.8
12.5°	1296.3	1298.1	1299.9	1301.6	1305.2
15°	1269.8	1275.1	1278.6	1285.7	1289.2
17.5°	1243.2	1248.5	1253.8	1262.7	1269.8
20°	1213.1	1216.6	1225.5	1236.1	1243.2
22.5°	1179.4	1184.7	1193.6	1207.8	1218.4
25°	1140.5	1147.6	1160.0	1179.4	1188.3
27.5°	1103.3	1108.6	1124.5	1145.8	1158.2
30°	1059.0	1066.1	1085.6	1112.1	1124.5
32.5°	1014.7	1023.6	1044.8	1074.9	1089.1
35°	968.7	979.3	1004.1	1036.0	1053.7
37.5°	922.7	933.3	961.6	997.0	1016.5
40°	874.8	885.5	917.3	956.3	977.5
42.5°	825.2	837.6	873.1	917.3	942.1
45°	775.7	788.1	827.0	876.6	903.2
47.5°	724.3	738.5	781.0	835.9	862.4
50°	673.0	688.9	736.7	793.4	819.9
52.5°	621.6	639.3	690.7	749.1	777.4
55°	572.0	591.5	646.4	704.8	731.4
57.5°	518.9	541.9	600.3	657.0	687.1
60°	469.3	494.1	554.3	611.0	642.8
62.5°	419.7	446.3	510.0	566.7	596.8
65°	371.9	398.5	462.2	520.7	550.8
67.5°	324.1	354.2	416.2	474.6	504.7
70°	278.0	309.9	370.1	426.8	456.9
72.5°	233.8	265.6	325.8	379.0	396.7
75°	189.5	221.4	278.0	309.9	320.5
77.5°	148.8	178.9	228.4	247.9	262.1
80°	111.6	138.1	173.6	185.9	187.7
82.5°	76.1	99.2	120.4	122.2	120.4
85°	46.0	58.4	65.5	62.0	58.4
87.5°	21.3	23.0	21.3	14.2	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)