

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: P277304

Luminaire Tested: **22CZ2-39HE-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277304
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-39HE-UNV-L92765-W2A1-U-3500K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3140.0 lumens
Efficiency: N/A
Efficacy: 103.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

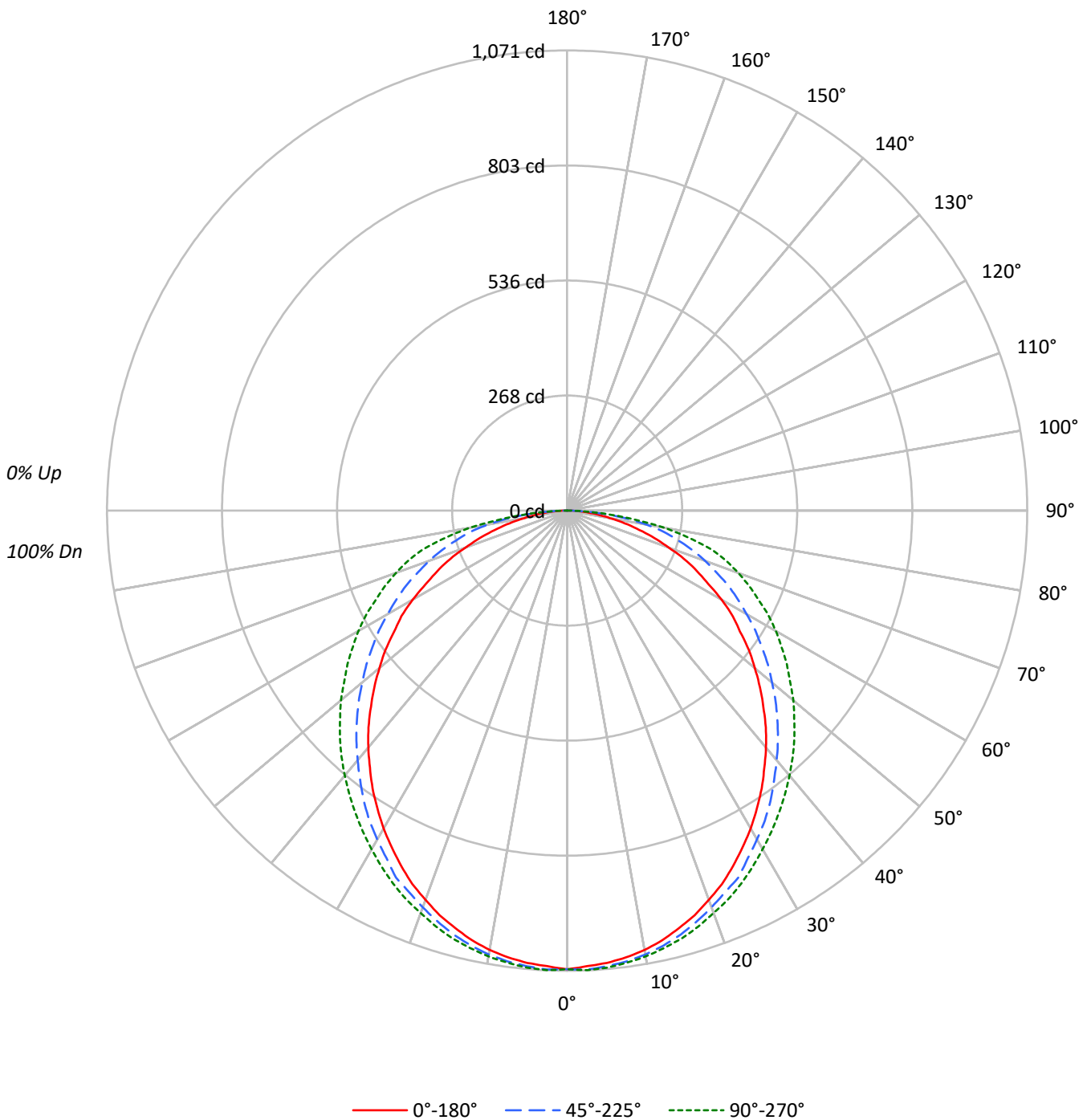
Input Watts (W): 30.225
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P277304

CATALOG NUMBER: 22CZ2-39HE-UNV-L92765-W2A1-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P277304

CATALOG NUMBER: 22CZ2-39HE-UNV-L92765-W2A1-U-3500K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82					82			
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68					68			
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56					56			
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48					48			
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41					41			
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36					36			
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32					32			
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28					28			
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25					25			
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2873	2873	2873
5°	2855	2876	2884
10°	2837	2867	2879
15°	2802	2845	2871
20°	2761	2814	2854
25°	2711	2798	2844
30°	2655	2746	2828
35°	2594	2711	2822
40°	2529	2665	2828
45°	2458	2634	2846
50°	2387	2607	2879
55°	2305	2595	2928
60°	2237	2595	3019
65°	2125	2637	3128
70°	1981	2687	3331
75°	1815	2779	3598
80°	1581	2898	3544
85°	1383	2575	2816



TEST NUMBER: P277304

CATALOG NUMBER: 22CZ2-39HE-UNV-L92765-W2A1-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.0	3.2
10°-20°	287.6	9.2
20°-30°	431.7	13.7
30°-40°	515.9	16.4
40°-50°	536.4	17.1
50°-60°	497.2	15.8
60°-70°	407.8	13.0
70°-80°	275.7	8.8
80°-90°	86.6	2.8
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°	820.3	26.1
0°-40°	1336.2	42.6
0°-60°	2369.9	75.5
0°-90°	3140.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3140.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1068	1068	1068	1068	1068	
5°	1057	1058	1065	1066	1068	100
15°	1006	1010	1021	1028	1031	284
25°	913	921	942	953	958	421
35°	790	800	825	850	859	493
45°	646	658	692	732	748	499
55°	491	507	553	603	624	442
65°	334	352	414	468	491	330
75°	175	204	267	321	346	185
85°	45	62	83	93	91	51
90°	0	0	0	0	0	



TEST NUMBER: P277304

CATALOG NUMBER: 22CZ2-39HE-UNV-L92765-W2A1-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1067.7	1067.7	1067.7	1067.7	1067.7
2.5°	1061.5	1064.6	1069.2	1070.7	1070.7
5°	1056.8	1058.4	1064.6	1066.1	1067.7
7.5°	1049.1	1052.2	1058.4	1059.9	1061.5
10°	1038.3	1041.4	1049.1	1052.2	1053.8
12.5°	1024.4	1027.5	1036.8	1041.4	1042.9
15°	1005.9	1010.5	1021.3	1027.5	1030.6
17.5°	987.3	991.9	1002.8	1012.0	1015.1
20°	964.1	975.0	982.7	995.0	996.6
22.5°	941.0	947.1	961.0	973.4	979.6
25°	913.1	920.9	942.5	953.3	958.0
27.5°	883.8	894.6	911.6	928.6	934.8
30°	854.4	862.2	883.8	903.9	910.1
32.5°	822.0	832.8	856.0	876.1	885.3
35°	789.5	800.4	825.1	849.8	859.1
37.5°	754.0	766.4	791.1	820.4	832.8
40°	720.0	729.3	758.6	794.2	805.0
42.5°	684.5	695.3	726.2	764.8	777.2
45°	645.8	658.2	692.2	732.4	747.8
47.5°	608.8	621.1	658.2	698.4	716.9
50°	570.1	585.6	622.7	669.0	687.6
52.5°	533.1	547.0	588.7	636.6	653.6
55°	491.3	506.8	553.1	602.6	624.2
57.5°	457.3	468.2	519.2	570.1	591.8
60°	415.6	429.5	482.1	536.1	560.9
62.5°	370.8	394.0	448.1	503.7	528.4
65°	333.7	352.3	414.1	468.2	491.3
67.5°	295.1	315.2	375.5	432.6	458.9
70°	251.8	278.1	341.5	398.6	423.4
72.5°	213.2	241.0	305.9	361.6	387.8
75°	174.6	204.0	267.3	321.4	346.1
77.5°	137.5	170.0	231.8	273.5	288.9
80°	102.0	132.9	187.0	216.3	228.7
82.5°	71.1	97.3	137.5	153.0	156.1
85°	44.8	61.8	83.4	92.7	91.2
87.5°	20.1	24.7	30.9	34.0	32.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)