

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: P277306

Luminaire Tested: **22CZ2-39HE-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277306
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-4500K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3325.0 lumens
Efficiency: N/A
Efficacy: 108.3 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

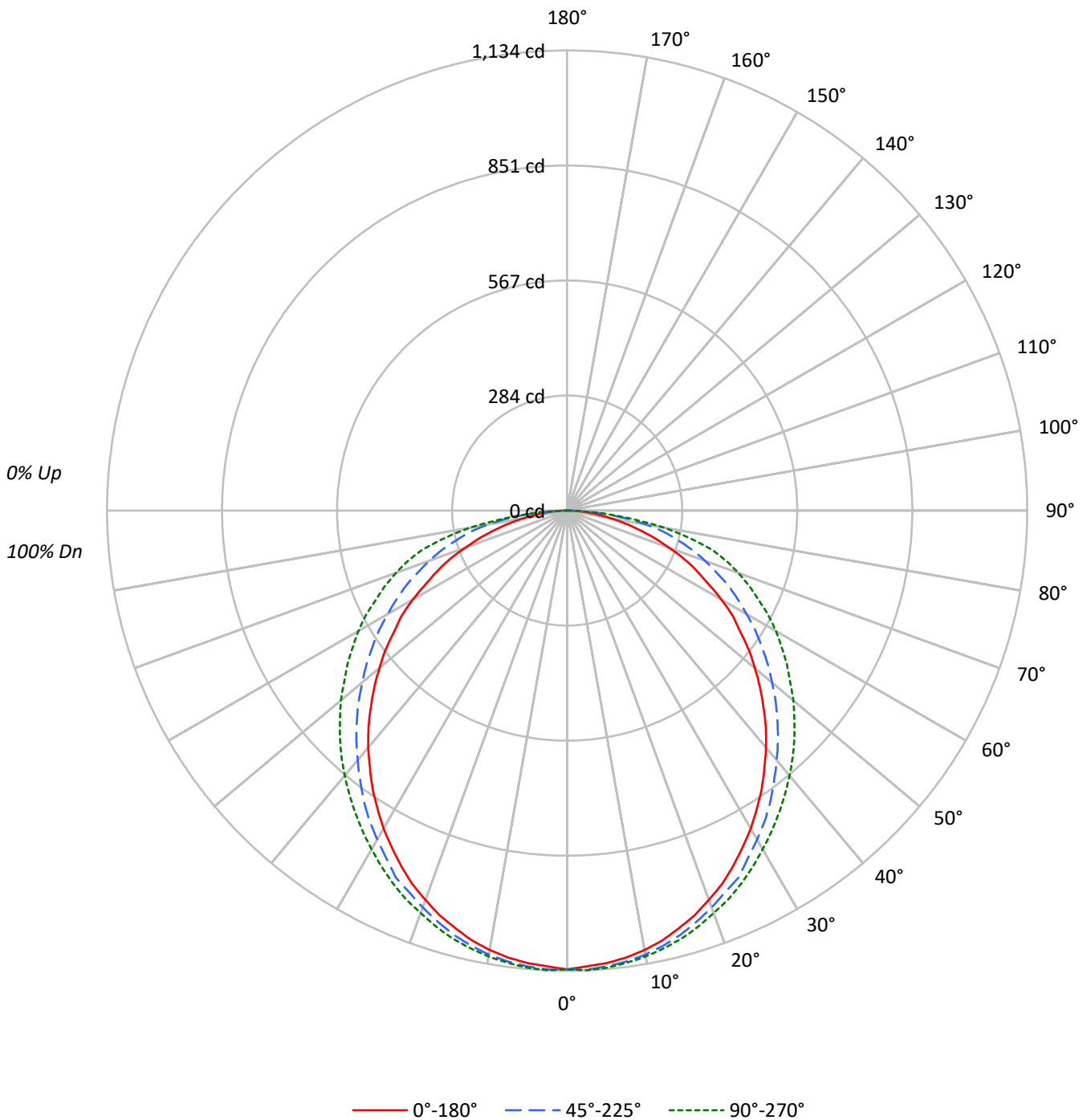
Input Watts (W): 30.69
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3042	3042	3042
5°	3023	3045	3054
10°	3004	3036	3049
15°	2967	3013	3040
20°	2924	2980	3022
25°	2871	2963	3012
30°	2811	2908	2994
35°	2747	2870	2988
40°	2678	2822	2994
45°	2603	2790	3014
50°	2527	2761	3048
55°	2441	2748	3101
60°	2369	2747	3196
65°	2250	2792	3313
70°	2098	2845	3527
75°	1922	2942	3811
80°	1674	3068	3752
85°	1463	2729	2979



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.9	3.2
10°-20°	304.5	9.2
20°-30°	457.2	13.7
30°-40°	546.3	16.4
40°-50°	568.1	17.1
50°-60°	526.5	15.8
60°-70°	431.9	13.0
70°-80°	291.9	8.8
80°-90°	91.7	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°	868.6	26.1
0°-40°	1414.9	42.6
0°-60°	2509.5	75.5
0°-90°	3325.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3325.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1131	1131	1131	1131	1131	
5°	1119	1121	1127	1129	1131	106
15°	1065	1070	1082	1088	1091	300
25°	967	975	998	1010	1014	445
35°	836	848	874	900	910	523
45°	684	697	733	776	792	528
55°	520	537	586	638	661	468
65°	353	373	438	496	520	349
75°	185	216	283	340	366	196
85°	47	65	88	98	96	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1130.6	1130.6	1130.6	1130.6	1130.6
2.5°	1124.0	1127.3	1132.2	1133.8	1133.8
5°	1119.1	1120.7	1127.3	1128.9	1130.6
7.5°	1110.9	1114.2	1120.7	1122.4	1124.0
10°	1099.5	1102.7	1110.9	1114.2	1115.8
12.5°	1084.7	1088.0	1097.8	1102.7	1104.4
15°	1065.1	1070.0	1081.5	1088.0	1091.3
17.5°	1045.5	1050.4	1061.8	1071.7	1074.9
20°	1020.9	1032.4	1040.6	1053.7	1055.3
22.5°	996.4	1002.9	1017.7	1030.8	1037.3
25°	966.9	975.1	998.0	1009.5	1014.4
27.5°	935.9	947.3	965.3	983.3	989.9
30°	904.8	913.0	935.9	957.1	963.7
32.5°	870.4	881.9	906.4	927.7	937.5
35°	836.1	847.5	873.7	899.9	909.7
37.5°	798.4	811.5	837.7	868.8	881.9
40°	762.4	772.3	803.3	841.0	852.4
42.5°	724.8	736.3	769.0	809.9	823.0
45°	683.9	697.0	733.0	775.5	791.9
47.5°	644.6	657.7	697.0	739.5	759.2
50°	603.7	620.1	659.4	708.4	728.1
52.5°	564.5	579.2	623.4	674.1	692.1
55°	520.3	536.6	585.7	638.1	661.0
57.5°	484.3	495.7	549.7	603.7	626.6
60°	440.1	454.8	510.5	567.7	593.9
62.5°	392.7	417.2	474.5	533.4	559.6
65°	353.4	373.0	438.5	495.7	520.3
67.5°	312.5	333.8	397.6	458.1	485.9
70°	266.7	294.5	361.6	422.1	448.3
72.5°	225.8	255.2	324.0	382.9	410.7
75°	184.9	216.0	283.0	340.3	366.5
77.5°	145.6	180.0	245.4	289.6	306.0
80°	108.0	140.7	198.0	229.1	242.1
82.5°	75.3	103.1	145.6	162.0	165.2
85°	47.4	65.4	88.4	98.2	96.5
87.5°	21.3	26.2	32.7	36.0	34.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)