

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: P277424

Luminaire Tested: **22CZ2-39HE-S-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277424
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-39HE-S-UNV-L82765-W2A1-U-6500K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4046.0 lumens
Efficiency: N/A
Efficacy: 128.7 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

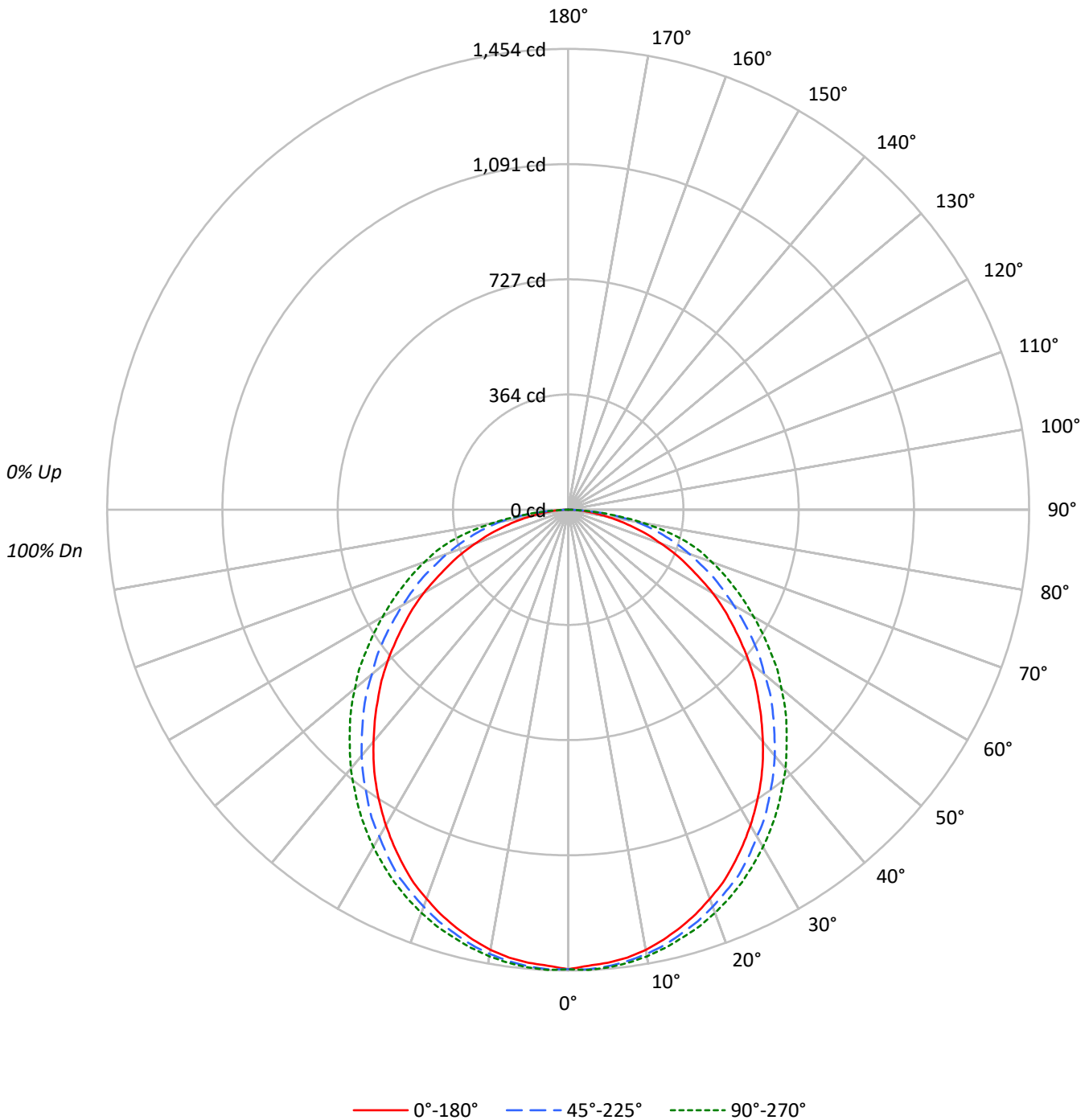
Input Watts (W): 31.434
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49					49			
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27					27			
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3901	3901	3901
5°	3875	3906	3916
10°	3853	3889	3910
15°	3802	3855	3892
20°	3741	3817	3876
25°	3666	3778	3851
30°	3572	3701	3819
35°	3473	3634	3783
40°	3355	3561	3747
45°	3233	3477	3707
50°	3114	3383	3675
55°	2967	3321	3649
60°	2835	3241	3637
65°	2644	3221	3678
70°	2436	3194	3788
75°	2198	3239	3984
80°	1901	3335	3744
85°	1575	2797	2797



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.1	3.4
10°-20°	390.2	9.6
20°-30°	583.8	14.4
30°-40°	691.4	17.1
40°-50°	704.6	17.4
50°-60°	631.5	15.6
60°-70°	494.4	12.2
70°-80°	318.8	7.9
80°-90°	94.2	2.3
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°	1111.1	27.5
0°-40°	1802.5	44.5
0°-60°	3138.6	77.6
0°-90°	4046.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4046.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1450	1450	1450	1450	1450	
5°	1435	1438	1446	1448	1450	136
15°	1365	1372	1384	1395	1397	385
25°	1235	1246	1272	1289	1297	568
35°	1057	1070	1106	1140	1152	661
45°	850	868	914	961	974	656
55°	632	653	708	757	778	567
65°	415	440	506	555	578	413
75°	211	244	312	364	383	227
85°	51	70	91	91	91	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1449.8	1449.8	1449.8	1449.8	1449.8
2.5°	1440.4	1444.1	1451.7	1453.6	1453.6
5°	1434.7	1438.5	1446.0	1447.9	1449.8
7.5°	1425.3	1427.2	1436.6	1440.4	1442.3
10°	1410.2	1413.9	1423.4	1429.0	1430.9
12.5°	1389.4	1395.1	1406.4	1413.9	1415.8
15°	1364.9	1372.4	1383.7	1395.1	1397.0
17.5°	1338.4	1346.0	1361.1	1374.3	1378.1
20°	1306.3	1315.8	1332.8	1347.9	1353.5
22.5°	1274.2	1281.8	1302.6	1321.4	1327.1
25°	1234.6	1245.9	1272.4	1289.3	1296.9
27.5°	1193.1	1206.3	1232.7	1255.4	1262.9
30°	1149.7	1162.9	1191.2	1219.5	1228.9
32.5°	1104.3	1119.4	1153.4	1181.7	1191.2
35°	1057.2	1070.4	1106.2	1140.2	1151.5
37.5°	1008.1	1019.4	1060.9	1096.8	1108.1
40°	955.2	970.3	1013.7	1055.3	1066.6
42.5°	902.4	919.3	962.8	1008.1	1019.4
45°	849.5	868.4	913.7	960.9	974.1
47.5°	798.5	813.6	864.6	909.9	928.8
50°	743.8	758.9	808.0	858.9	877.8
52.5°	687.1	707.9	760.8	809.9	832.5
55°	632.4	653.2	707.9	757.0	777.8
57.5°	581.4	598.4	655.1	706.0	726.8
60°	526.7	541.8	602.2	656.9	675.8
62.5°	468.2	490.8	553.1	604.1	626.7
65°	415.3	439.9	505.9	555.0	577.7
67.5°	366.2	388.9	453.1	505.9	530.5
70°	309.6	339.8	405.9	458.7	481.4
72.5°	264.3	290.7	358.7	411.5	436.1
75°	211.4	243.5	311.5	364.3	383.2
77.5°	168.0	200.1	264.3	305.8	315.3
80°	122.7	154.8	215.2	236.0	241.6
82.5°	83.1	113.3	154.8	160.5	162.3
85°	51.0	69.8	90.6	90.6	90.6
87.5°	24.5	28.3	32.1	30.2	30.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)