

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: P277346

Luminaire Tested: **22CZ2-44HE-S-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277346
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: 22CZ2-44HE-S-UNV-L83050-W2A1-U-3500K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4343.0 lumens
Efficiency: N/A
Efficacy: 125.5 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

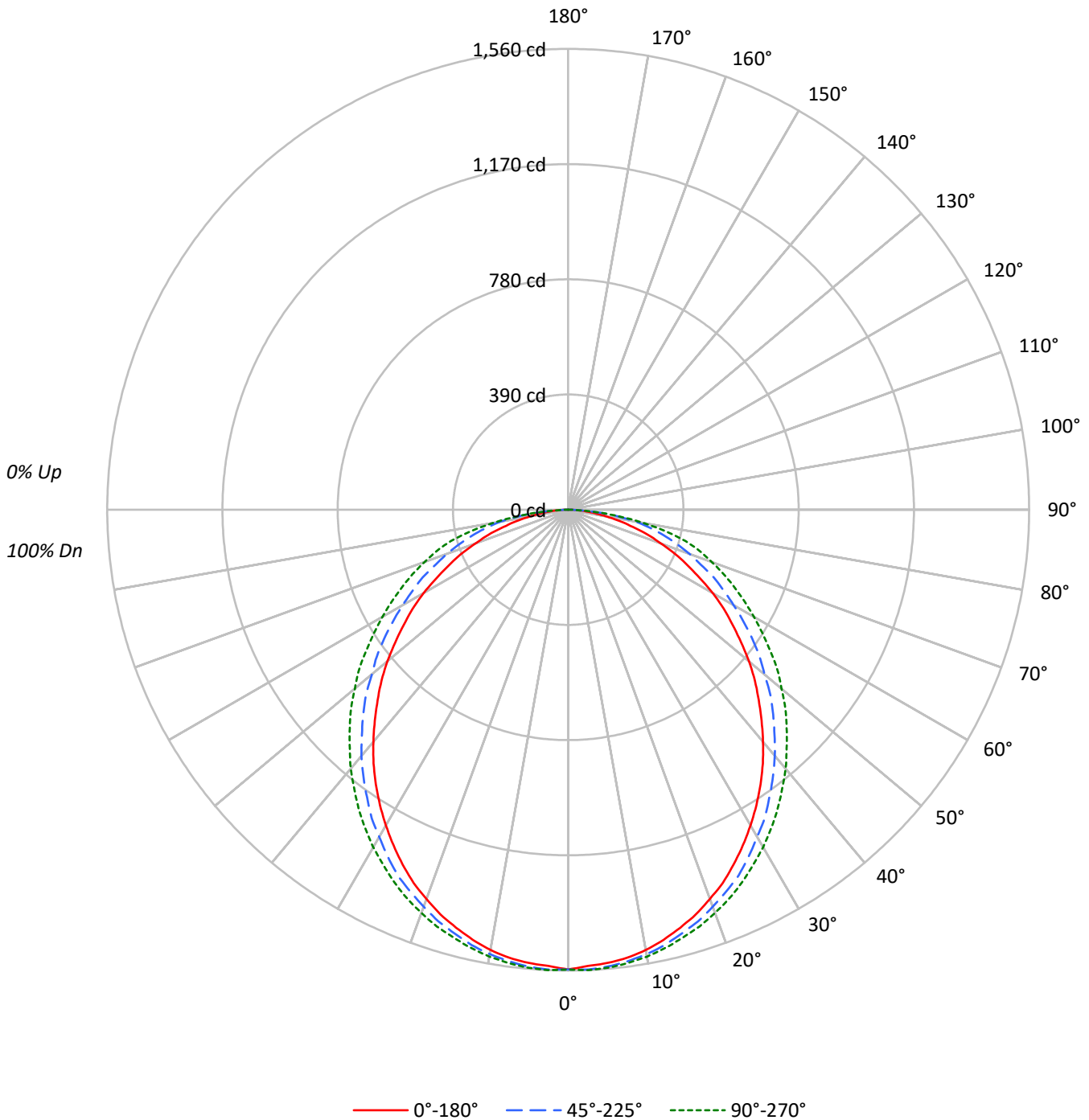
Input Watts (W): 34.596
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4188	4188	4188
5°	4160	4193	4204
10°	4136	4175	4197
15°	4081	4138	4177
20°	4015	4097	4161
25°	3935	4055	4133
30°	3834	3973	4099
35°	3728	3901	4061
40°	3602	3822	4022
45°	3470	3733	3979
50°	3342	3631	3945
55°	3185	3565	3917
60°	3043	3479	3904
65°	2839	3458	3948
70°	2615	3428	4065
75°	2360	3476	4276
80°	2041	3580	4020
85°	1689	3004	3004



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.2	3.4
10°-20°	418.8	9.6
20°-30°	626.7	14.4
30°-40°	742.1	17.1
40°-50°	756.3	17.4
50°-60°	677.9	15.6
60°-70°	530.7	12.2
70°-80°	342.2	7.9
80°-90°	101.1	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°	1192.6	27.5
0°-40°	1934.8	44.5
0°-60°	3369.0	77.6
0°-90°	4343.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4343.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1556	1556	1556	1556	1556	
5°	1540	1544	1552	1554	1556	146
15°	1465	1473	1485	1498	1500	413
25°	1325	1337	1366	1384	1392	610
35°	1135	1149	1187	1224	1236	709
45°	912	932	981	1031	1046	704
55°	679	701	760	813	835	609
65°	446	472	543	596	620	443
75°	227	261	334	391	411	243
85°	55	75	97	97	97	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1556.2	1556.2	1556.2	1556.2	1556.2
2.5°	1546.1	1550.2	1558.3	1560.3	1560.3
5°	1540.0	1544.1	1552.2	1554.2	1556.2
7.5°	1529.9	1531.9	1542.0	1546.1	1548.1
10°	1513.7	1517.7	1527.9	1533.9	1536.0
12.5°	1491.4	1497.5	1509.6	1517.7	1519.8
15°	1465.0	1473.2	1485.3	1497.5	1499.5
17.5°	1436.7	1444.8	1461.0	1475.2	1479.2
20°	1402.2	1412.4	1430.6	1446.8	1452.9
22.5°	1367.8	1375.9	1398.2	1418.4	1424.5
25°	1325.2	1337.4	1365.8	1384.0	1392.1
27.5°	1280.6	1294.8	1323.2	1347.5	1355.6
30°	1234.0	1248.2	1278.6	1309.0	1319.2
32.5°	1185.4	1201.6	1238.1	1268.5	1278.6
35°	1134.8	1148.9	1187.4	1223.9	1236.1
37.5°	1082.1	1094.2	1138.8	1177.3	1189.5
40°	1025.3	1041.5	1088.1	1132.7	1144.9
42.5°	968.6	986.8	1033.4	1082.1	1094.2
45°	911.9	932.1	980.8	1031.4	1045.6
47.5°	857.1	873.4	928.1	976.7	997.0
50°	798.4	814.6	867.3	922.0	942.3
52.5°	737.6	759.9	816.6	869.3	893.6
55°	678.8	701.1	759.9	812.6	834.9
57.5°	624.1	642.4	703.1	757.9	780.1
60°	565.4	581.6	646.4	705.2	725.4
62.5°	502.5	526.8	593.7	648.4	672.7
65°	445.8	472.1	543.1	595.7	620.1
67.5°	393.1	417.4	486.3	543.1	569.4
70°	332.3	364.7	435.7	492.4	516.7
72.5°	283.7	312.1	385.0	441.7	468.1
75°	227.0	261.4	334.3	391.1	411.3
77.5°	180.3	214.8	283.7	328.3	338.4
80°	131.7	166.2	231.0	253.3	259.4
82.5°	89.2	121.6	166.2	172.2	174.3
85°	54.7	75.0	97.3	97.3	97.3
87.5°	26.3	30.4	34.4	32.4	32.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)