

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: P277251

Luminaire Tested: **22CZ2-39HE-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277251
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-L82765-W2A1-U-4000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3664.0 lumens
Efficiency: N/A
Efficacy: 120.1 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

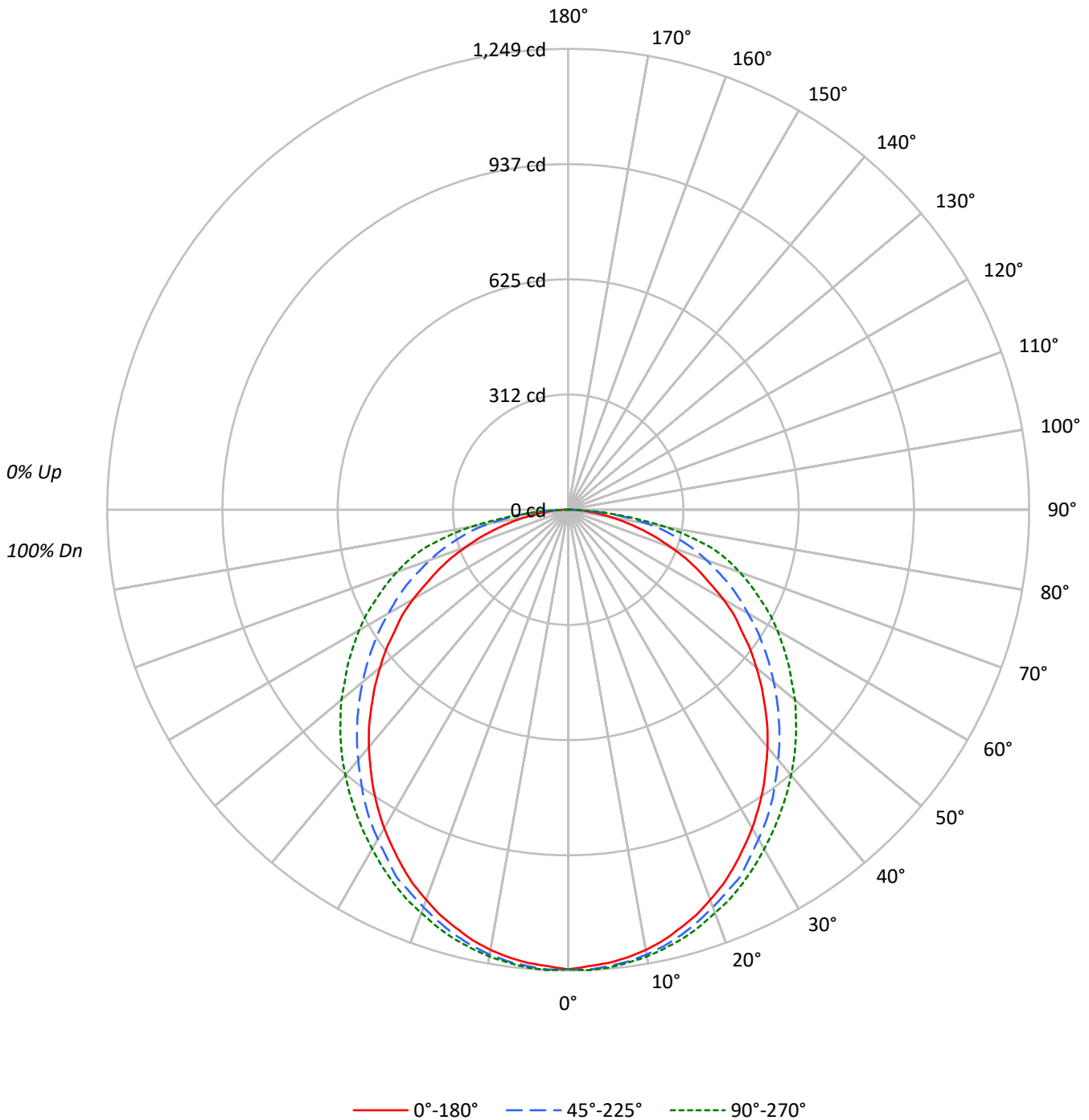
Input Watts (W): 30.504
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3352	3352	3352
5°	3331	3356	3365
10°	3311	3345	3360
15°	3270	3320	3350
20°	3222	3284	3330
25°	3164	3265	3319
30°	3098	3205	3300
35°	3027	3163	3293
40°	2951	3110	3300
45°	2868	3074	3321
50°	2785	3042	3359
55°	2690	3028	3417
60°	2610	3027	3522
65°	2479	3077	3650
70°	2312	3135	3887
75°	2118	3243	4199
80°	1844	3381	4135
85°	1615	3007	3285



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.8	3.2
10°-20°	335.6	9.2
20°-30°	503.8	13.7
30°-40°	602.0	16.4
40°-50°	626.0	17.1
50°-60°	580.2	15.8
60°-70°	475.9	13.0
70°-80°	321.7	8.8
80°-90°	101.1	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°	957.2	26.1
0°-40°	1559.2	42.6
0°-60°	2765.3	75.5
0°-90°	3664.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3664.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1246	1246	1246	1246	1246	
5°	1233	1235	1242	1244	1246	117
15°	1174	1179	1192	1199	1203	331
25°	1066	1074	1100	1112	1118	491
35°	921	934	963	992	1002	576
45°	754	768	808	855	873	582
55°	573	591	646	703	728	515
65°	389	411	483	546	573	385
75°	204	238	312	375	404	216
85°	52	72	97	108	106	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1245.8	1245.8	1245.8	1245.8	1245.8
2.5°	1238.6	1242.2	1247.6	1249.4	1249.4
5°	1233.2	1235.0	1242.2	1244.0	1245.8
7.5°	1224.2	1227.8	1235.0	1236.8	1238.6
10°	1211.6	1215.2	1224.2	1227.8	1229.6
12.5°	1195.3	1199.0	1209.8	1215.2	1217.0
15°	1173.7	1179.1	1191.7	1199.0	1202.6
17.5°	1152.1	1157.5	1170.1	1180.9	1184.5
20°	1125.0	1137.7	1146.7	1161.1	1162.9
22.5°	1098.0	1105.2	1121.4	1135.8	1143.1
25°	1065.5	1074.5	1099.8	1112.4	1117.8
27.5°	1031.3	1043.9	1063.7	1083.6	1090.8
30°	997.0	1006.0	1031.3	1054.7	1061.9
32.5°	959.2	971.8	998.8	1022.3	1033.1
35°	921.3	933.9	962.8	991.6	1002.4
37.5°	879.8	894.3	923.1	957.4	971.8
40°	840.2	851.0	885.2	926.7	939.3
42.5°	798.7	811.3	847.4	892.5	906.9
45°	753.6	768.0	807.7	854.6	872.6
47.5°	710.4	724.8	768.0	814.9	836.6
50°	665.3	683.3	726.6	780.7	802.3
52.5°	622.0	638.2	686.9	742.8	762.6
55°	573.3	591.4	645.5	703.1	728.4
57.5°	533.7	546.3	605.8	665.3	690.5
60°	485.0	501.2	562.5	625.6	654.5
62.5°	432.7	459.7	522.9	587.8	616.6
65°	389.4	411.1	483.2	546.3	573.3
67.5°	344.4	367.8	438.1	504.8	535.5
70°	293.9	324.5	398.4	465.2	494.0
72.5°	248.8	281.3	357.0	421.9	452.5
75°	203.7	238.0	311.9	375.0	403.9
77.5°	160.5	198.3	270.4	319.1	337.1
80°	119.0	155.1	218.2	252.4	266.8
82.5°	82.9	113.6	160.5	178.5	182.1
85°	52.3	72.1	97.4	108.2	106.4
87.5°	23.4	28.8	36.1	39.7	37.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)