

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: P277255

Luminaire Tested: **22CZ2-39HE-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277255  
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-5700K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3827.0 lumens  
Efficiency: N/A  
Efficacy: 123.6 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

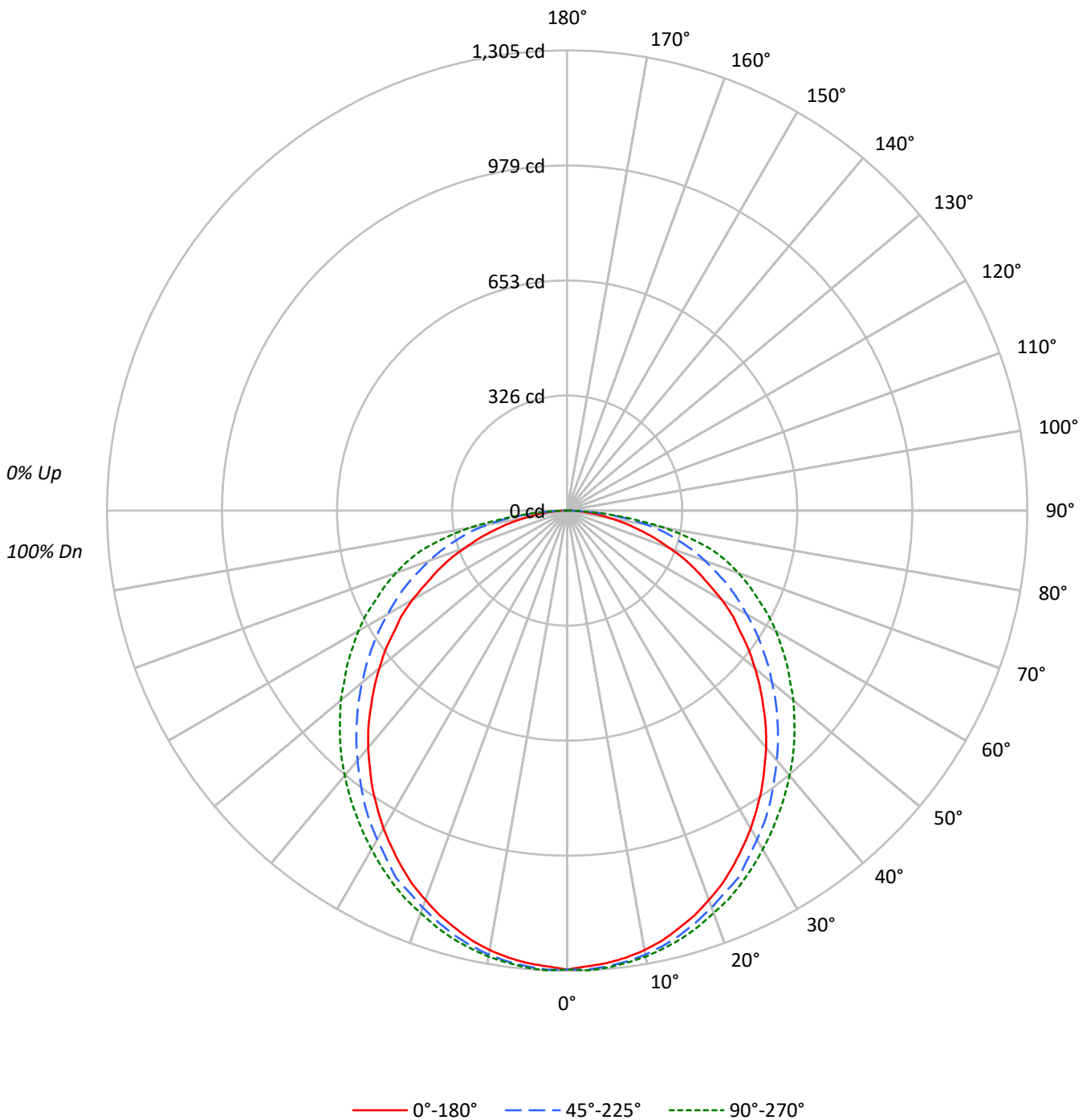
Input Watts (W): 30.969  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3502	3502	3502
5°	3479	3505	3515
10°	3458	3494	3509
15°	3415	3468	3499
20°	3365	3430	3478
25°	3304	3411	3467
30°	3236	3347	3447
35°	3161	3303	3439
40°	3083	3248	3446
45°	2996	3210	3468
50°	2909	3177	3508
55°	2809	3163	3569
60°	2726	3162	3679
65°	2590	3214	3813
70°	2415	3275	4060
75°	2213	3387	4386
80°	1926	3532	4319
85°	1686	3140	3430



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.1	3.2
10°-20°	350.5	9.2
20°-30°	526.2	13.7
30°-40°	628.8	16.4
40°-50°	653.8	17.1
50°-60°	606.0	15.8
60°-70°	497.1	13.0
70°-80°	336.0	8.8
80°-90°	105.6	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°	999.8	26.1
0°-40°	1628.5	42.6
0°-60°	2888.3	75.5
0°-90°	3827.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3827.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1301	1301	1301	1301	1301	
5°	1288	1290	1298	1299	1301	122
15°	1226	1232	1245	1252	1256	346
25°	1113	1122	1149	1162	1168	513
35°	962	976	1006	1036	1047	601
45°	787	802	844	893	911	608
55°	599	618	674	734	761	538
65°	407	429	505	571	599	402
75°	213	249	326	392	422	226
85°	55	75	102	113	111	62
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1301.3	1301.3	1301.3	1301.3	1301.3
2.5°	1293.7	1297.5	1303.1	1305.0	1305.0
5°	1288.1	1290.0	1297.5	1299.4	1301.3
7.5°	1278.7	1282.4	1290.0	1291.8	1293.7
10°	1265.5	1269.2	1278.7	1282.4	1284.3
12.5°	1248.5	1252.3	1263.6	1269.2	1271.1
15°	1225.9	1231.6	1244.8	1252.3	1256.1
17.5°	1203.3	1209.0	1222.2	1233.5	1237.2
20°	1175.1	1188.3	1197.7	1212.7	1214.6
22.5°	1146.8	1154.4	1171.3	1186.4	1193.9
25°	1112.9	1122.4	1148.7	1161.9	1167.5
27.5°	1077.2	1090.3	1111.1	1131.8	1139.3
30°	1041.4	1050.8	1077.2	1101.6	1109.2
32.5°	1001.8	1015.0	1043.3	1067.7	1079.0
35°	962.3	975.5	1005.6	1035.7	1047.0
37.5°	919.0	934.0	964.2	999.9	1015.0
40°	877.5	888.8	924.6	967.9	981.1
42.5°	834.2	847.4	885.1	932.2	947.2
45°	787.2	802.2	843.6	892.6	911.4
47.5°	742.0	757.0	802.2	851.2	873.8
50°	694.9	713.7	758.9	815.4	838.0
52.5°	649.7	666.6	717.5	775.9	796.6
55°	598.8	617.7	674.2	734.4	760.8
57.5°	557.4	570.6	632.7	694.9	721.2
60°	506.6	523.5	587.5	653.4	683.6
62.5°	452.0	480.2	546.1	613.9	644.0
65°	406.8	429.4	504.7	570.6	598.8
67.5°	359.7	384.2	457.6	527.3	559.3
70°	307.0	339.0	416.2	485.9	516.0
72.5°	259.9	293.8	372.9	440.7	472.7
75°	212.8	248.6	325.8	391.7	421.8
77.5°	167.6	207.1	282.5	333.3	352.1
80°	124.3	162.0	227.9	263.6	278.7
82.5°	86.6	118.6	167.6	186.4	190.2
85°	54.6	75.3	101.7	113.0	111.1
87.5°	24.5	30.1	37.7	41.4	39.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)