

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: P277317

Luminaire Tested: **22CZ2-44HE-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277317  
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: 22CZ2-44HE-UNV-L92765-W2A1-U-5500K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3865.0 lumens  
Efficiency: N/A  
Efficacy: 108.8 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

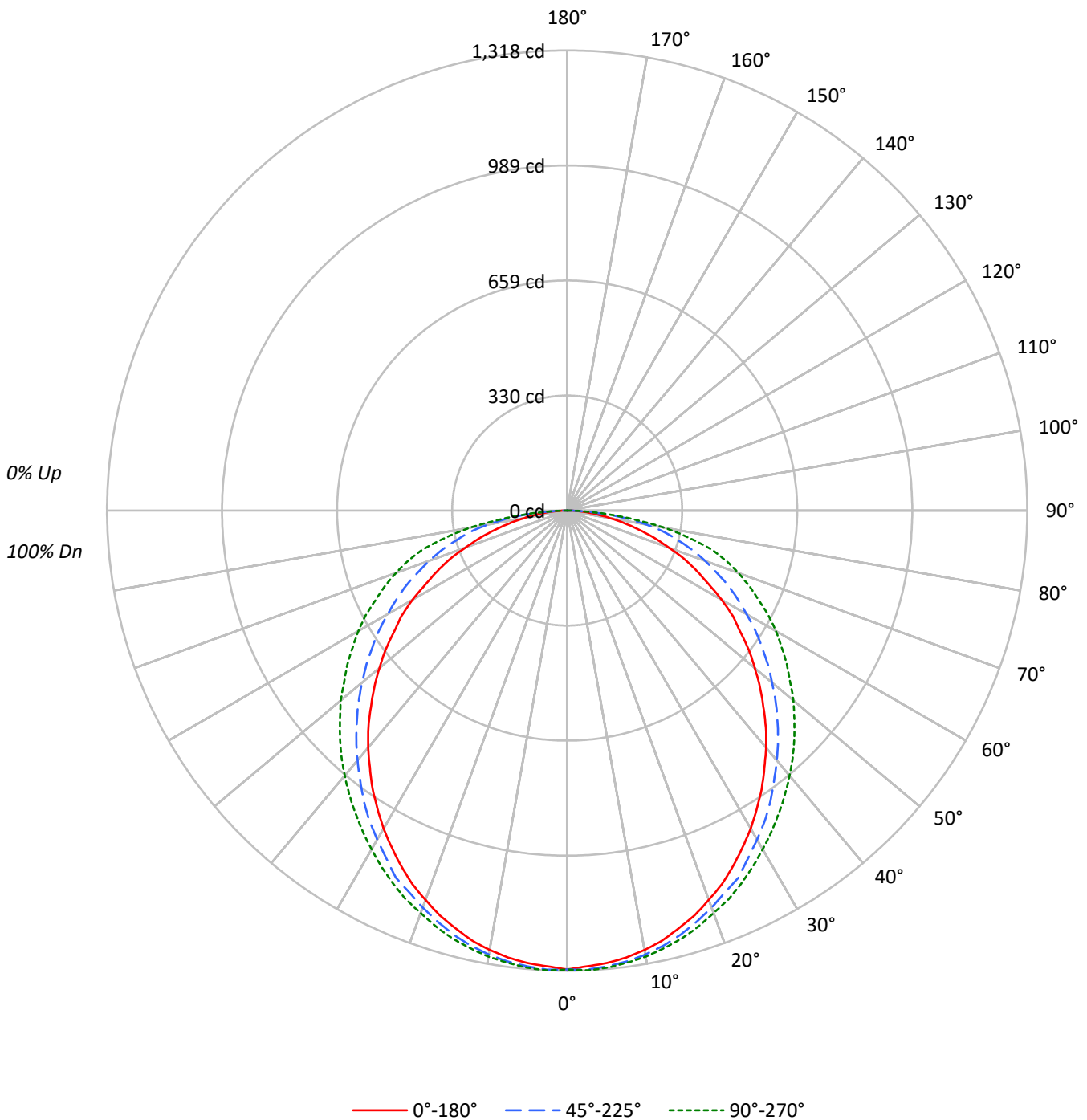
Input Watts (W): 35.526  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3536	3536	3536
5°	3514	3540	3550
10°	3492	3528	3544
15°	3449	3502	3534
20°	3398	3464	3513
25°	3337	3445	3501
30°	3268	3380	3481
35°	3192	3336	3474
40°	3113	3280	3481
45°	3025	3242	3503
50°	2938	3208	3543
55°	2837	3194	3605
60°	2753	3194	3716
65°	2616	3245	3851
70°	2439	3307	4100
75°	2234	3421	4429
80°	1945	3566	4362
85°	1704	3171	3464



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.3	3.2
10°-20°	354.0	9.2
20°-30°	531.4	13.7
30°-40°	635.0	16.4
40°-50°	660.3	17.1
50°-60°	612.0	15.8
60°-70°	502.0	13.0
70°-80°	339.3	8.8
80°-90°	106.6	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°	1009.7	26.1
0°-40°	1644.7	42.6
0°-60°	2917.0	75.5
0°-90°	3865.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3865.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1314	1314	1314	1314	1314	
5°	1301	1303	1310	1312	1314	123
15°	1238	1244	1257	1265	1268	349
25°	1124	1134	1160	1173	1179	518
35°	972	985	1016	1046	1057	607
45°	795	810	852	902	920	614
55°	605	624	681	742	768	544
65°	411	434	510	576	605	406
75°	215	251	329	396	426	228
85°	55	76	103	114	112	63
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1314.2	1314.2	1314.2	1314.2	1314.2
2.5°	1306.6	1310.4	1316.1	1318.0	1318.0
5°	1300.9	1302.8	1310.4	1312.3	1314.2
7.5°	1291.3	1295.2	1302.8	1304.7	1306.6
10°	1278.0	1281.8	1291.3	1295.2	1297.1
12.5°	1260.9	1264.7	1276.1	1281.8	1283.7
15°	1238.1	1243.8	1257.1	1264.7	1268.5
17.5°	1215.3	1221.0	1234.3	1245.7	1249.5
20°	1186.7	1200.1	1209.6	1224.8	1226.7
22.5°	1158.2	1165.8	1182.9	1198.2	1205.8
25°	1124.0	1133.5	1160.1	1173.4	1179.1
27.5°	1087.9	1101.2	1122.1	1143.0	1150.6
30°	1051.7	1061.2	1087.9	1112.6	1120.2
32.5°	1011.8	1025.1	1053.6	1078.3	1089.8
35°	971.8	985.2	1015.6	1046.0	1057.4
37.5°	928.1	943.3	973.7	1009.9	1025.1
40°	886.3	897.7	933.8	977.5	990.9
42.5°	842.5	855.8	893.9	941.4	956.6
45°	795.0	810.2	852.0	901.5	920.5
47.5°	749.3	764.5	810.2	859.6	882.5
50°	701.8	720.8	766.4	823.5	846.3
52.5°	656.1	673.3	724.6	783.6	804.5
55°	604.8	623.8	680.9	741.7	768.3
57.5°	562.9	576.3	639.0	701.8	728.4
60°	511.6	528.7	593.4	659.9	690.4
62.5°	456.4	485.0	551.5	620.0	650.4
65°	410.8	433.6	509.7	576.3	604.8
67.5°	363.3	388.0	462.1	532.5	564.8
70°	310.0	342.3	420.3	490.7	521.1
72.5°	262.5	296.7	376.6	445.0	477.4
75°	214.9	251.0	329.0	395.6	426.0
77.5°	169.3	209.2	285.3	336.6	355.6
80°	125.5	163.6	230.1	266.3	281.5
82.5°	87.5	119.8	169.3	188.3	192.1
85°	55.2	76.1	102.7	114.1	112.2
87.5°	24.7	30.4	38.0	41.8	39.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)