

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: P277427

Luminaire Tested: **22CZ2-44HE-S-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277427  
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-L82765-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: 4241.0 lumens  
Efficiency: N/A  
Efficacy: 121.9 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

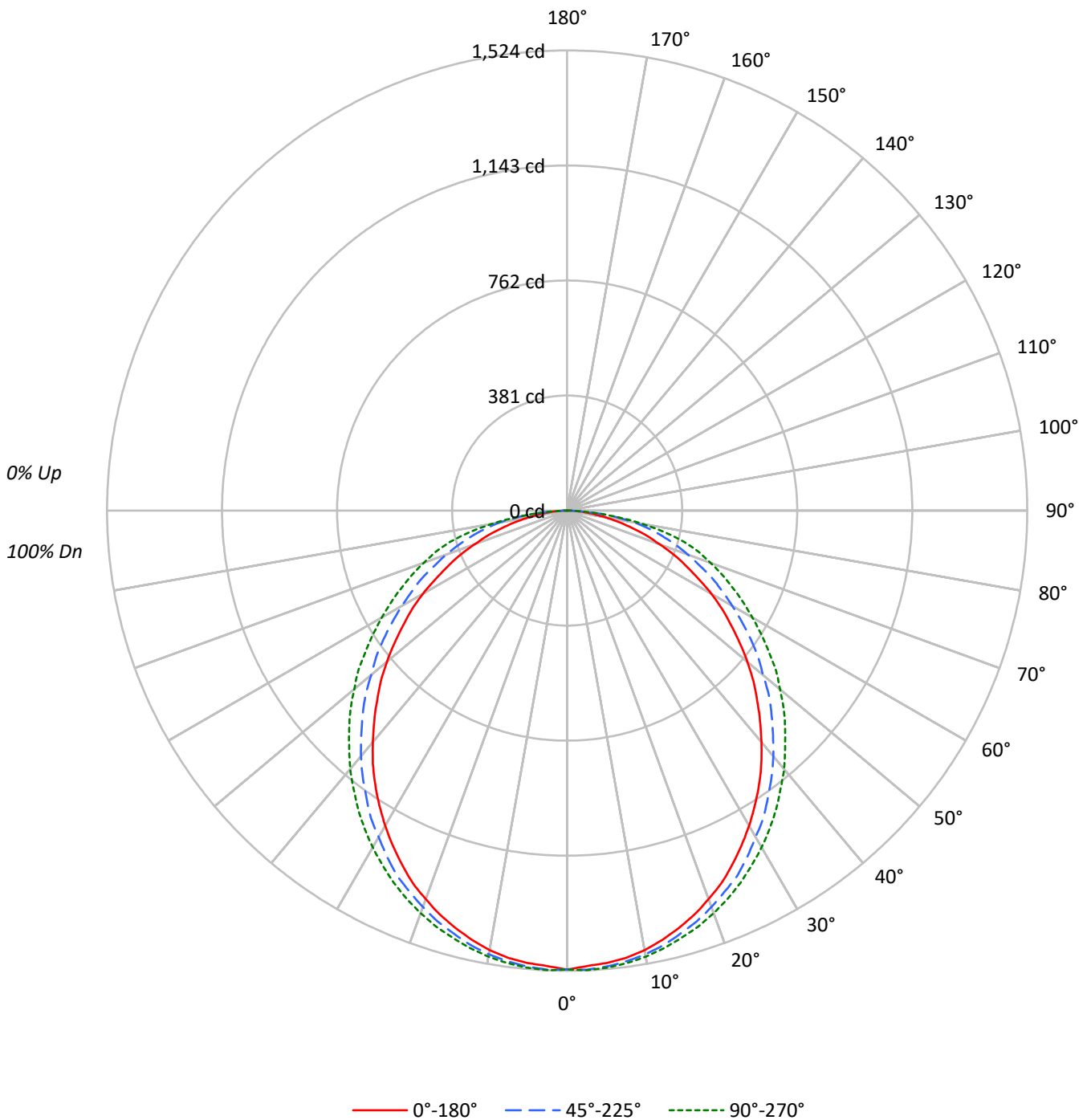
Input Watts (W): 34.782  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4089	4089	4089
5°	4062	4094	4105
10°	4039	4077	4098
15°	3986	4041	4079
20°	3921	4001	4063
25°	3842	3960	4036
30°	3745	3880	4003
35°	3640	3809	3965
40°	3517	3733	3927
45°	3389	3645	3886
50°	3264	3545	3852
55°	3110	3481	3825
60°	2971	3397	3813
65°	2772	3377	3855
70°	2553	3347	3970
75°	2304	3395	4177
80°	1993	3496	3925
85°	1649	2933	2933



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.7	3.4
10°-20°	409.0	9.6
20°-30°	611.9	14.4
30°-40°	724.7	17.1
40°-50°	738.6	17.4
50°-60°	661.9	15.6
60°-70°	518.2	12.2
70°-80°	334.2	7.9
80°-90°	98.7	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°	1164.6	27.5
0°-40°	1889.3	44.5
0°-60°	3289.8	77.6
0°-90°	4241.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4241.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1520	1520	1520	1520	1520	
5°	1504	1508	1516	1518	1520	143
15°	1431	1439	1450	1462	1464	403
25°	1294	1306	1334	1352	1359	596
35°	1108	1122	1160	1195	1207	693
45°	890	910	958	1007	1021	688
55°	663	685	742	794	815	594
65°	435	461	530	582	606	432
75°	222	255	326	382	402	238
85°	53	73	95	95	95	63
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1519.7	1519.7	1519.7	1519.7	1519.7
2.5°	1509.8	1513.7	1521.7	1523.6	1523.6
5°	1503.9	1507.8	1515.7	1517.7	1519.7
7.5°	1494.0	1495.9	1505.8	1509.8	1511.8
10°	1478.1	1482.1	1492.0	1497.9	1499.9
12.5°	1456.4	1462.3	1474.2	1482.1	1484.1
15°	1430.6	1438.6	1450.4	1462.3	1464.3
17.5°	1402.9	1410.9	1426.7	1440.5	1444.5
20°	1369.3	1379.2	1397.0	1412.8	1418.8
22.5°	1335.7	1343.6	1365.3	1385.1	1391.1
25°	1294.1	1306.0	1333.7	1351.5	1359.4
27.5°	1250.6	1264.4	1292.1	1315.9	1323.8
30°	1205.1	1218.9	1248.6	1278.3	1288.2
32.5°	1157.6	1173.4	1209.0	1238.7	1248.6
35°	1108.1	1122.0	1159.5	1195.2	1207.0
37.5°	1056.7	1068.5	1112.1	1149.7	1161.5
40°	1001.2	1017.1	1062.6	1106.1	1118.0
42.5°	945.8	963.7	1009.2	1056.7	1068.5
45°	890.4	910.2	957.7	1007.2	1021.0
47.5°	837.0	852.8	906.3	953.8	973.5
50°	779.6	795.5	846.9	900.3	920.1
52.5°	720.3	742.0	797.4	848.9	872.6
55°	662.9	684.6	742.0	793.5	815.2
57.5°	609.5	627.3	686.6	740.1	761.8
60°	552.1	567.9	631.2	688.6	708.4
62.5°	490.7	514.5	579.8	633.2	656.9
65°	435.3	461.0	530.3	581.8	605.5
67.5°	383.9	407.6	474.9	530.3	556.0
70°	324.5	356.2	425.4	480.8	504.6
72.5°	277.0	304.7	376.0	431.4	457.1
75°	221.6	255.3	326.5	381.9	401.7
77.5°	176.1	209.7	277.0	320.6	330.5
80°	128.6	162.3	225.6	247.3	253.3
82.5°	87.1	118.7	162.3	168.2	170.2
85°	53.4	73.2	95.0	95.0	95.0
87.5°	25.7	29.7	33.6	31.7	31.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)