

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: P277432

Luminaire Tested: **22CZ2-44HE-S-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277432  
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-5700K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4527.0 lumens  
Efficiency: N/A  
Efficacy: 127.4 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

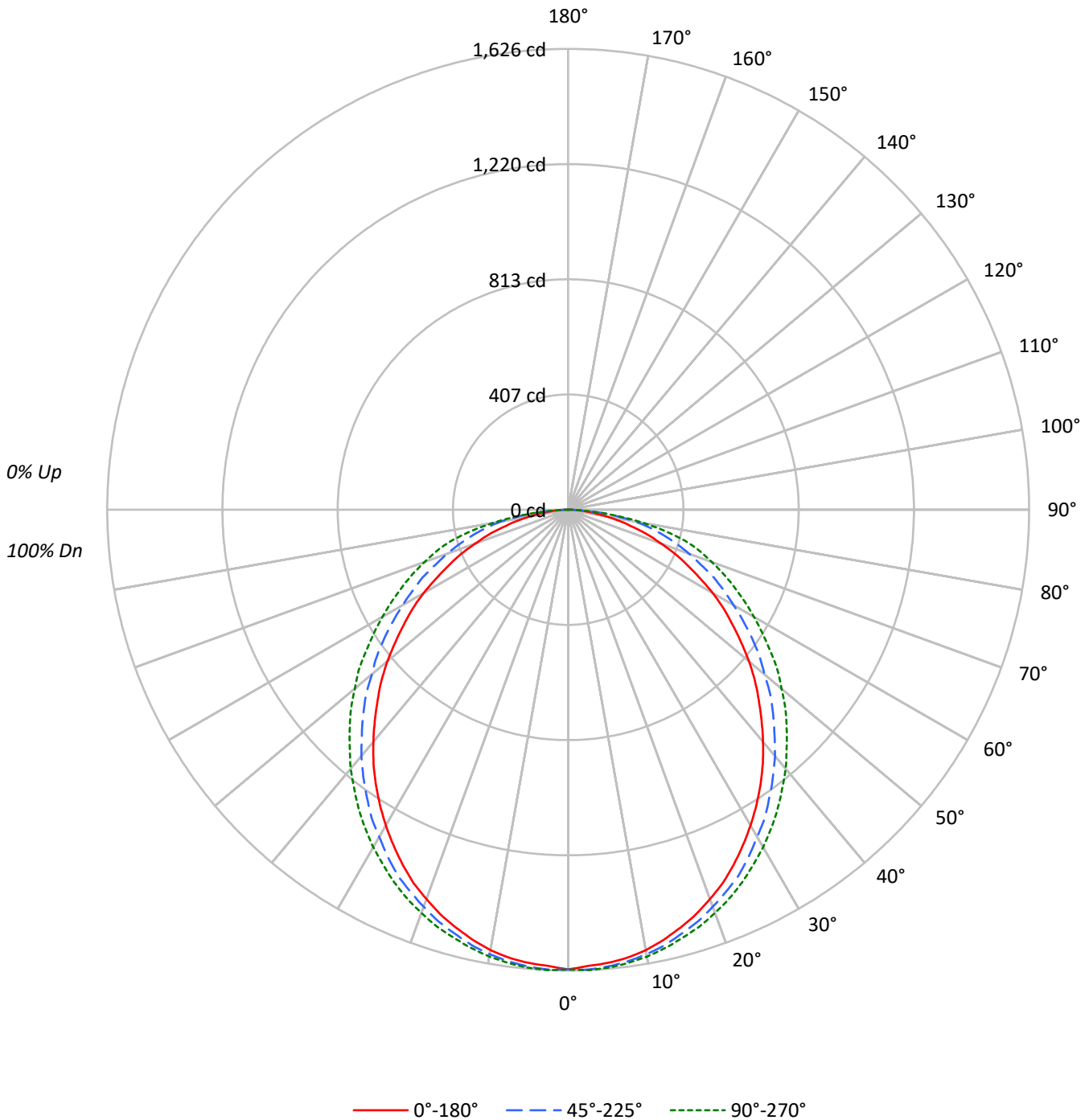
Input Watts (W): 35.526  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	4365	4365	4365
5°	4336	4370	4382
10°	4311	4352	4375
15°	4254	4313	4354
20°	4186	4270	4337
25°	4102	4227	4309
30°	3997	4141	4273
35°	3886	4066	4232
40°	3755	3984	4192
45°	3617	3890	4148
50°	3484	3785	4112
55°	3320	3716	4083
60°	3172	3626	4070
65°	2959	3605	4115
70°	2725	3573	4238
75°	2460	3623	4458
80°	2128	3732	4190
85°	1760	3131	3131



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	153.4	3.4
10°-20°	436.6	9.6
20°-30°	653.2	14.4
30°-40°	773.6	17.1
40°-50°	788.4	17.4
50°-60°	706.6	15.6
60°-70°	553.2	12.2
70°-80°	356.7	7.9
80°-90°	105.4	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°	1243.2	27.5
0°-40°	2016.7	44.5
0°-60°	3511.7	77.6
0°-90°	4527.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4527.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1622	1622	1622	1622	1622	
5°	1605	1610	1618	1620	1622	152
15°	1527	1536	1548	1561	1563	431
25°	1381	1394	1424	1443	1451	636
35°	1183	1198	1238	1276	1288	739
45°	950	972	1022	1075	1090	734
55°	708	731	792	847	870	634
65°	465	492	566	621	646	462
75°	237	272	348	408	429	254
85°	57	78	101	101	101	67
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1622.2	1622.2	1622.2	1622.2	1622.2
2.5°	1611.6	1615.8	1624.3	1626.4	1626.4
5°	1605.3	1609.5	1617.9	1620.1	1622.2
7.5°	1594.7	1596.8	1607.4	1611.6	1613.7
10°	1577.8	1582.0	1592.6	1598.9	1601.0
12.5°	1554.6	1560.9	1573.6	1582.0	1584.1
15°	1527.1	1535.6	1548.2	1560.9	1563.0
17.5°	1497.5	1506.0	1522.9	1537.7	1541.9
20°	1461.6	1472.2	1491.2	1508.1	1514.4
22.5°	1425.7	1434.2	1457.4	1478.5	1484.9
25°	1381.4	1394.0	1423.6	1442.6	1451.1
27.5°	1334.9	1349.7	1379.3	1404.6	1413.1
30°	1286.3	1301.1	1332.8	1364.5	1375.0
32.5°	1235.6	1252.5	1290.6	1322.2	1332.8
35°	1182.8	1197.6	1237.7	1275.8	1288.4
37.5°	1127.9	1140.6	1187.1	1227.2	1239.9
40°	1068.8	1085.7	1134.2	1180.7	1193.4
42.5°	1009.6	1028.6	1077.2	1127.9	1140.6
45°	950.5	971.6	1022.3	1075.1	1089.9
47.5°	893.5	910.4	967.4	1018.1	1039.2
50°	832.2	849.1	904.0	961.0	982.2
52.5°	768.8	792.1	851.2	906.1	931.5
55°	707.6	730.8	792.1	847.0	870.2
57.5°	650.6	669.6	732.9	790.0	813.2
60°	589.3	606.2	673.8	735.0	756.2
62.5°	523.8	549.2	618.9	675.9	701.2
65°	464.7	492.1	566.1	621.0	646.3
67.5°	409.8	435.1	506.9	566.1	593.5
70°	346.4	380.2	454.1	513.3	538.6
72.5°	295.7	325.3	401.3	460.5	487.9
75°	236.6	272.5	348.5	407.7	428.8
77.5°	188.0	223.9	295.7	342.2	352.7
80°	137.3	173.2	240.8	264.0	270.4
82.5°	92.9	126.7	173.2	179.5	181.6
85°	57.0	78.2	101.4	101.4	101.4
87.5°	27.5	31.7	35.9	33.8	33.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)