

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: P277487

Luminaire Tested: **22CZ2-44HE-S-UNV-L92765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277487  
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-L92765-W2A1-U-6500K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4121.0 lumens  
Efficiency: N/A  
Efficacy: 113.9 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

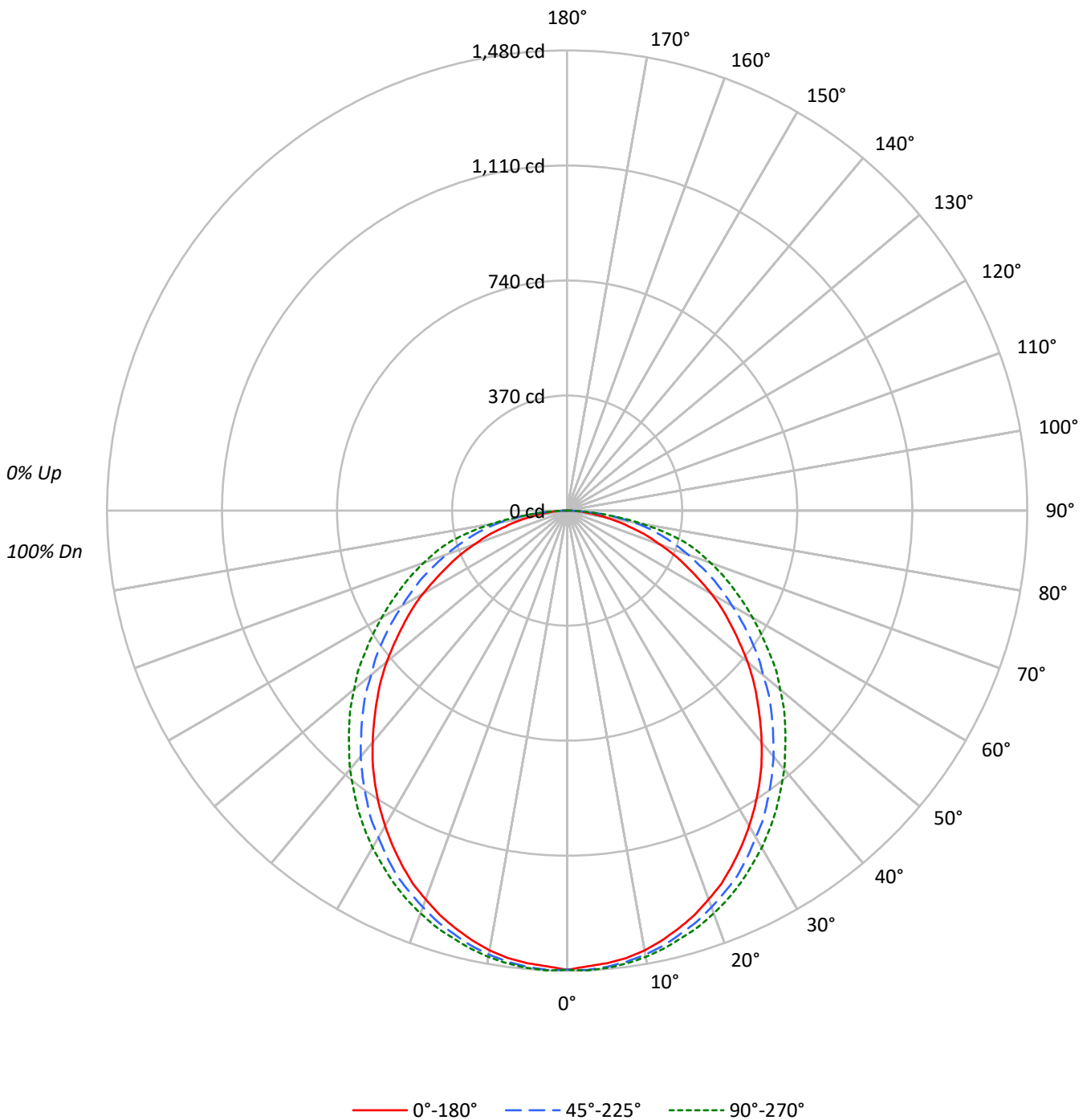
Input Watts (W): 36.177  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3974	3974	3974
5°	3947	3978	3989
10°	3925	3962	3983
15°	3873	3926	3964
20°	3810	3887	3948
25°	3734	3848	3922
30°	3639	3770	3889
35°	3537	3701	3853
40°	3418	3627	3816
45°	3293	3542	3776
50°	3172	3445	3743
55°	3022	3383	3717
60°	2887	3301	3704
65°	2693	3281	3747
70°	2481	3253	3858
75°	2239	3299	4058
80°	1937	3397	3814
85°	1602	2850	2850



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.6	3.4
10°-20°	397.4	9.6
20°-30°	594.6	14.4
30°-40°	704.2	17.1
40°-50°	717.7	17.4
50°-60°	643.2	15.6
60°-70°	503.6	12.2
70°-80°	324.7	7.9
80°-90°	95.9	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°	1131.7	27.5
0°-40°	1835.9	44.5
0°-60°	3196.7	77.6
0°-90°	4121.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4121.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1477	1477	1477	1477	1477	
5°	1461	1465	1473	1475	1477	139
15°	1390	1398	1409	1421	1423	392
25°	1258	1269	1296	1313	1321	579
35°	1077	1090	1127	1161	1173	673
45°	865	884	931	979	992	668
55°	644	665	721	771	792	578
65°	423	448	515	565	588	420
75°	215	248	317	371	390	231
85°	52	71	92	92	92	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1476.7	1476.7	1476.7	1476.7	1476.7
2.5°	1467.1	1470.9	1478.6	1480.5	1480.5
5°	1461.3	1465.1	1472.8	1474.8	1476.7
7.5°	1451.7	1453.6	1463.2	1467.1	1469.0
10°	1436.3	1440.2	1449.8	1455.5	1457.5
12.5°	1415.2	1420.9	1432.5	1440.2	1442.1
15°	1390.2	1397.8	1409.4	1420.9	1422.8
17.5°	1363.2	1370.9	1386.3	1399.8	1403.6
20°	1330.6	1340.2	1357.5	1372.9	1378.6
22.5°	1297.9	1305.6	1326.7	1345.9	1351.7
25°	1257.5	1269.0	1295.9	1313.2	1320.9
27.5°	1215.2	1228.6	1255.6	1278.6	1286.3
30°	1171.0	1184.4	1213.3	1242.1	1251.7
32.5°	1124.8	1140.2	1174.8	1203.7	1213.3
35°	1076.7	1090.2	1126.7	1161.3	1172.9
37.5°	1026.8	1038.3	1080.6	1117.1	1128.7
40°	972.9	988.3	1032.5	1074.8	1086.4
42.5°	919.1	936.4	980.6	1026.8	1038.3
45°	865.2	884.5	930.6	978.7	992.1
47.5°	813.3	828.7	880.6	926.8	946.0
50°	757.6	773.0	822.9	874.9	894.1
52.5°	699.9	721.0	774.9	824.9	847.9
55°	644.1	665.3	721.0	771.0	792.2
57.5°	592.2	609.5	667.2	719.1	740.3
60°	536.5	551.8	613.4	669.1	688.3
62.5°	476.8	499.9	563.4	615.3	638.4
65°	423.0	448.0	515.3	565.3	588.4
67.5°	373.0	396.1	461.5	515.3	540.3
70°	315.3	346.1	413.4	467.2	490.3
72.5°	269.2	296.1	365.3	419.2	444.2
75°	215.3	248.0	317.3	371.1	390.3
77.5°	171.1	203.8	269.2	311.5	321.1
80°	125.0	157.7	219.2	240.3	246.1
82.5°	84.6	115.4	157.7	163.4	165.4
85°	51.9	71.1	92.3	92.3	92.3
87.5°	25.0	28.8	32.7	30.8	30.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)