

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: P277237

Luminaire Tested: **22CZ2-29HE-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277237  
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: 22CZ2-29HE-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: 2769.0 lumens  
Efficiency: N/A  
Efficacy: 129.5 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

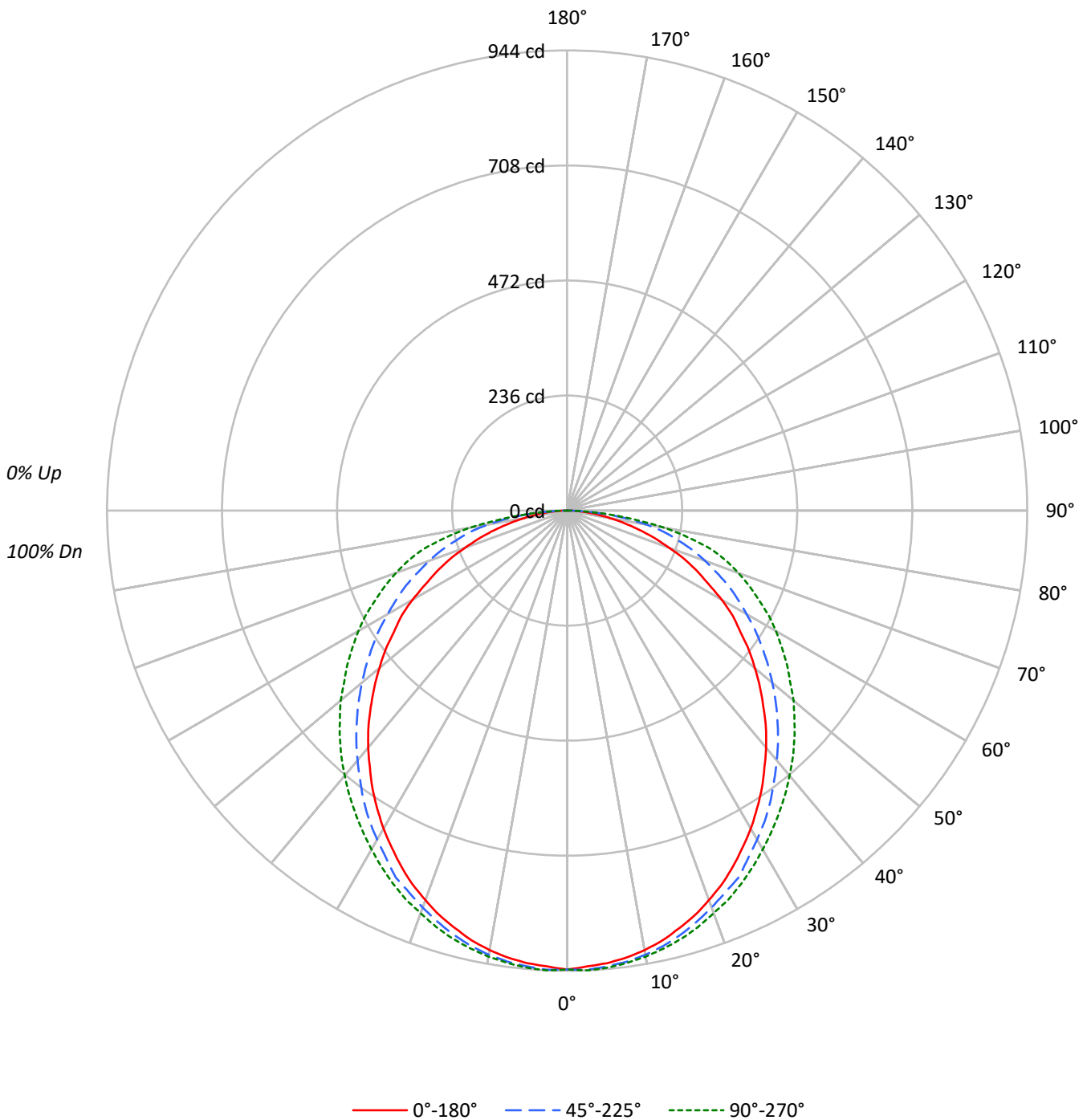
Input Watts (W): 21.39  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2534	2534	2534
5°	2518	2536	2543
10°	2502	2528	2539
15°	2471	2509	2532
20°	2435	2482	2517
25°	2391	2468	2508
30°	2341	2422	2494
35°	2287	2390	2489
40°	2230	2350	2494
45°	2167	2323	2510
50°	2105	2299	2538
55°	2033	2289	2583
60°	1972	2288	2662
65°	1874	2325	2759
70°	1747	2369	2937
75°	1601	2451	3173
80°	1393	2555	3126
85°	1220	2272	2482



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.0	3.2
10°-20°	253.6	9.2
20°-30°	380.7	13.7
30°-40°	454.9	16.4
40°-50°	473.1	17.1
50°-60°	438.5	15.8
60°-70°	359.6	13.0
70°-80°	243.1	8.8
80°-90°	76.4	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°	723.4	26.1
0°-40°	1178.3	42.6
0°-60°	2089.8	75.5
0°-90°	2769.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2769.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	942	942	942	942	942	
5°	932	933	939	940	942	88
15°	887	891	901	906	909	250
25°	805	812	831	841	845	371
35°	696	706	728	749	758	435
45°	570	580	610	646	660	440
55°	433	447	488	531	550	389
65°	294	311	365	413	433	291
75°	154	180	236	283	305	163
85°	40	54	74	82	80	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	941.5	941.5	941.5	941.5	941.5
2.5°	936.1	938.8	942.9	944.2	944.2
5°	932.0	933.3	938.8	940.1	941.5
7.5°	925.2	927.9	933.3	934.7	936.1
10°	915.6	918.3	925.2	927.9	929.2
12.5°	903.4	906.1	914.3	918.3	919.7
15°	887.0	891.1	900.6	906.1	908.8
17.5°	870.7	874.7	884.3	892.5	895.2
20°	850.2	859.8	866.6	877.5	878.8
22.5°	829.8	835.2	847.5	858.4	863.8
25°	805.3	812.1	831.1	840.7	844.8
27.5°	779.4	788.9	803.9	818.9	824.3
30°	753.5	760.3	779.4	797.1	802.5
32.5°	724.9	734.4	754.8	772.6	780.7
35°	696.3	705.8	727.6	749.4	757.6
37.5°	664.9	675.8	697.6	723.5	734.4
40°	634.9	643.1	669.0	700.3	709.9
42.5°	603.6	613.1	640.4	674.5	685.4
45°	569.5	580.4	610.4	645.8	659.5
47.5°	536.8	547.7	580.4	615.9	632.2
50°	502.8	516.4	549.1	590.0	606.3
52.5°	470.1	482.3	519.1	561.4	576.4
55°	433.3	446.9	487.8	531.4	550.5
57.5°	403.3	412.8	457.8	502.8	521.9
60°	366.5	378.8	425.1	472.8	494.6
62.5°	327.0	347.4	395.1	444.2	466.0
65°	294.3	310.7	365.2	412.8	433.3
67.5°	260.2	278.0	331.1	381.5	404.7
70°	222.1	245.3	301.1	351.5	373.3
72.5°	188.0	212.6	269.8	318.8	342.0
75°	154.0	179.9	235.7	283.4	305.2
77.5°	121.3	149.9	204.4	241.2	254.8
80°	89.9	117.2	164.9	190.8	201.7
82.5°	62.7	85.8	121.3	134.9	137.6
85°	39.5	54.5	73.6	81.8	80.4
87.5°	17.7	21.8	27.3	30.0	28.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)