

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: P277461

Luminaire Tested: **22CZ2-34HE-S-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277461  
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: 22CZ2-34HE-S-UNV-L92765-W2A1-U-2700K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2646.0 lumens  
Efficiency: N/A  
Efficacy: 103.5 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

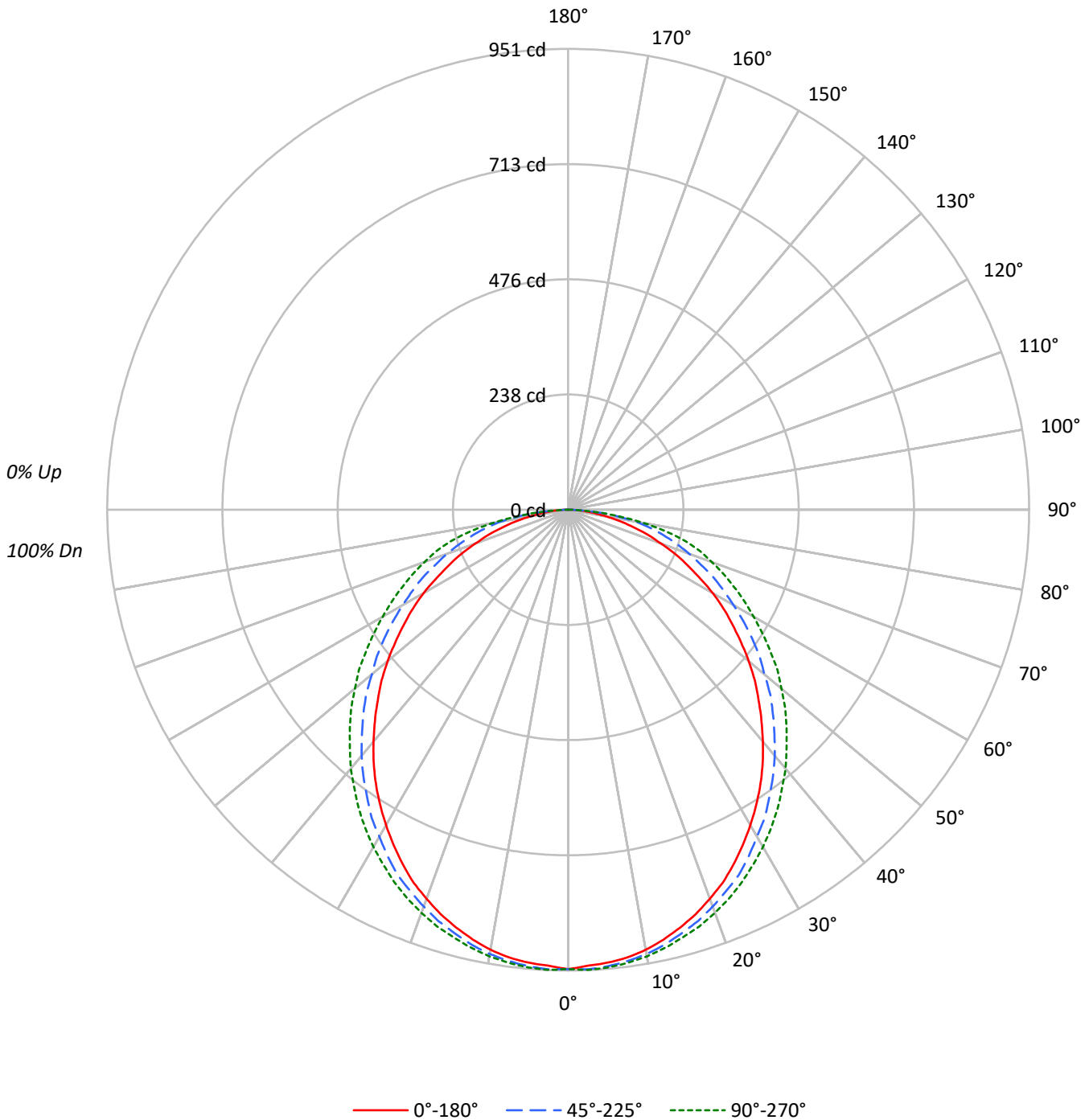
Input Watts (W): 25.575  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49					49			
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27					27			
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2551	2551	2551
5°	2535	2555	2561
10°	2520	2544	2557
15°	2487	2521	2545
20°	2446	2496	2535
25°	2397	2471	2518
30°	2336	2421	2497
35°	2271	2377	2474
40°	2194	2329	2450
45°	2114	2274	2424
50°	2036	2212	2403
55°	1940	2172	2386
60°	1854	2119	2379
65°	1729	2107	2406
70°	1593	2088	2477
75°	1438	2118	2606
80°	1243	2180	2448
85°	1028	1831	1831



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.7	3.4
10°-20°	255.2	9.6
20°-30°	381.8	14.4
30°-40°	452.1	17.1
40°-50°	460.8	17.4
50°-60°	413.0	15.6
60°-70°	323.4	12.2
70°-80°	208.5	7.9
80°-90°	61.6	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°	726.6	27.5
0°-40°	1178.8	44.5
0°-60°	2052.6	77.6
0°-90°	2646.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2646.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	948	948	948	948	948	
5°	938	941	946	947	948	89
15°	893	898	905	912	914	252
25°	807	815	832	843	848	372
35°	691	700	724	746	753	432
45°	556	568	598	628	637	429
55°	414	427	463	495	509	371
65°	272	288	331	363	378	270
75°	138	159	204	238	251	148
85°	33	46	59	59	59	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	948.1	948.1	948.1	948.1	948.1
2.5°	942.0	944.4	949.4	950.6	950.6
5°	938.3	940.7	945.7	946.9	948.1
7.5°	932.1	933.3	939.5	942.0	943.2
10°	922.2	924.7	930.9	934.6	935.8
12.5°	908.6	912.3	919.7	924.7	925.9
15°	892.6	897.5	904.9	912.3	913.6
17.5°	875.3	880.2	890.1	898.8	901.2
20°	854.3	860.5	871.6	881.5	885.2
22.5°	833.3	838.3	851.8	864.2	867.9
25°	807.4	814.8	832.1	843.2	848.1
27.5°	780.2	788.9	806.2	821.0	825.9
30°	751.8	760.5	779.0	797.5	803.7
32.5°	722.2	732.1	754.3	772.8	779.0
35°	691.4	700.0	723.5	745.7	753.1
37.5°	659.3	666.7	693.8	717.3	724.7
40°	624.7	634.6	663.0	690.1	697.5
42.5°	590.1	601.2	629.6	659.3	666.7
45°	555.6	567.9	597.5	628.4	637.0
47.5°	522.2	532.1	565.4	595.1	607.4
50°	486.4	496.3	528.4	561.7	574.1
52.5°	449.4	463.0	497.5	529.6	544.4
55°	413.6	427.2	463.0	495.1	508.6
57.5°	380.2	391.4	428.4	461.7	475.3
60°	344.4	354.3	393.8	429.6	442.0
62.5°	306.2	321.0	361.7	395.1	409.9
65°	271.6	287.7	330.9	363.0	377.8
67.5°	239.5	254.3	296.3	330.9	346.9
70°	202.5	222.2	265.4	300.0	314.8
72.5°	172.8	190.1	234.6	269.1	285.2
75°	138.3	159.3	203.7	238.3	250.6
77.5°	109.9	130.9	172.8	200.0	206.2
80°	80.2	101.2	140.7	154.3	158.0
82.5°	54.3	74.1	101.2	104.9	106.2
85°	33.3	45.7	59.3	59.3	59.3
87.5°	16.0	18.5	21.0	19.8	19.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)