

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: P277299

Luminaire Tested: **22CZ2-34HE-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277299  
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: 22CZ2-34HE-UNV-L92765-W2A1-U-5500K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3006.0 lumens  
Efficiency: N/A  
Efficacy: 113.8 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

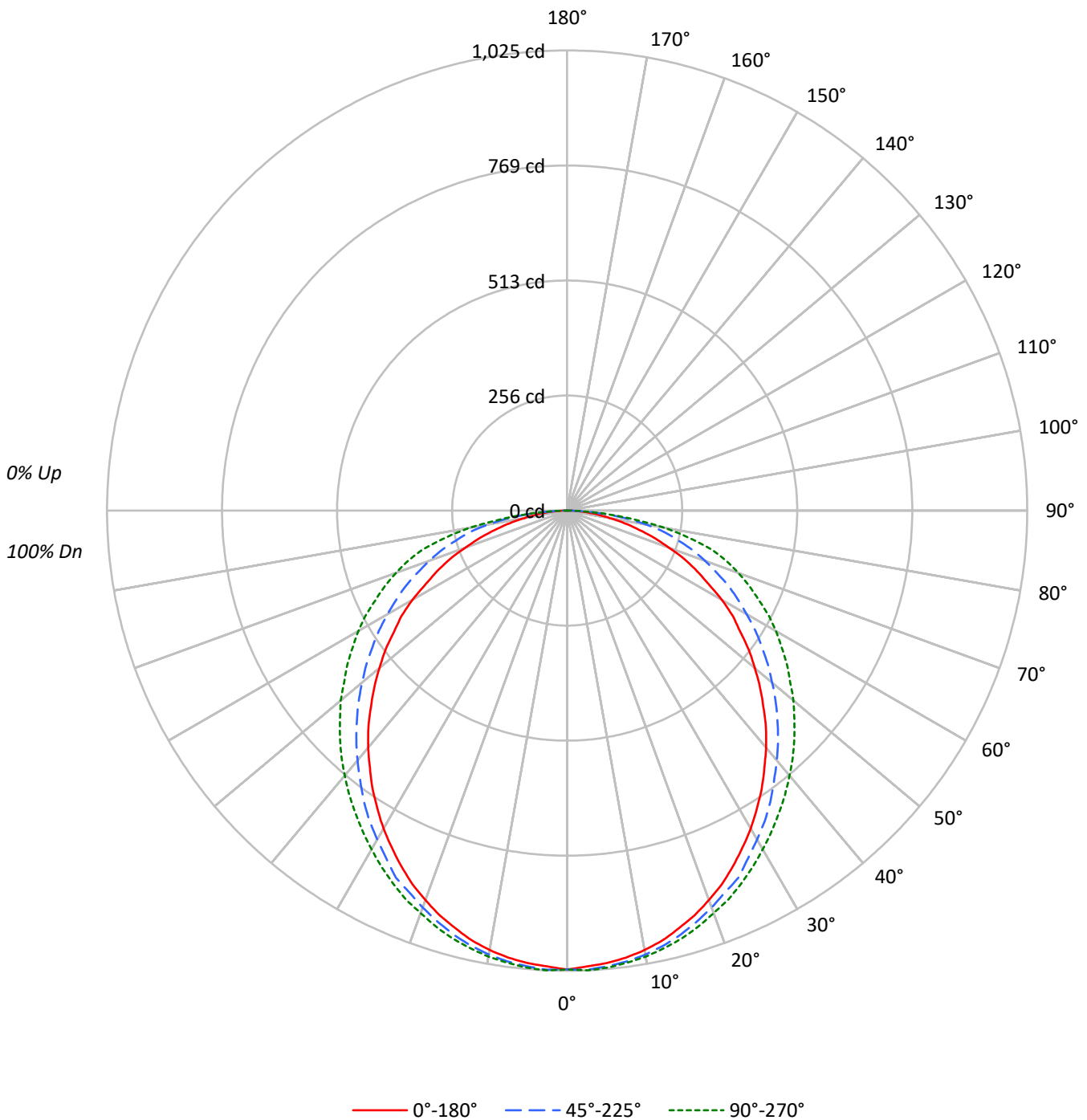
Input Watts (W): 26.412  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82					82			
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68					68			
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56					56			
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48					48			
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41					41			
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36					36			
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32					32			
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28					28			
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25					25			
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23					23			

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

	0°	45°	90°
0°	2750	2750	2750
5°	2733	2753	2761
10°	2716	2744	2757
15°	2683	2724	2749
20°	2643	2694	2732
25°	2596	2679	2723
30°	2542	2629	2707
35°	2483	2595	2702
40°	2421	2551	2707
45°	2353	2522	2724
50°	2285	2496	2756
55°	2207	2484	2804
60°	2141	2484	2890
65°	2034	2524	2995
70°	1897	2572	3189
75°	1737	2661	3445
80°	1512	2774	3392
85°	1325	2467	2695



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.7	3.2
10°-20°	275.3	9.2
20°-30°	413.3	13.7
30°-40°	493.9	16.4
40°-50°	513.6	17.1
50°-60°	476.0	15.8
60°-70°	390.4	13.0
70°-80°	263.9	8.8
80°-90°	82.9	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°	785.3	26.1
0°-40°	1279.2	42.6
0°-60°	2268.7	75.5
0°-90°	3006.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3006.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1022	1022	1022	1022	1022	
5°	1012	1013	1019	1021	1022	96
15°	963	967	978	984	987	272
25°	874	882	902	913	917	403
35°	756	766	790	814	822	472
45°	618	630	663	701	716	477
55°	470	485	530	577	598	423
65°	320	337	396	448	470	316
75°	167	195	256	308	331	177
85°	43	59	80	89	87	49
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1022.1	1022.1	1022.1	1022.1	1022.1
2.5°	1016.2	1019.1	1023.6	1025.1	1025.1
5°	1011.7	1013.2	1019.1	1020.6	1022.1
7.5°	1004.3	1007.3	1013.2	1014.7	1016.2
10°	994.0	996.9	1004.3	1007.3	1008.8
12.5°	980.7	983.6	992.5	996.9	998.4
15°	962.9	967.4	977.7	983.6	986.6
17.5°	945.2	949.6	960.0	968.8	971.8
20°	923.0	933.3	940.7	952.6	954.1
22.5°	900.8	906.7	920.0	931.9	937.8
25°	874.2	881.6	902.3	912.6	917.1
27.5°	846.1	856.4	872.7	889.0	894.9
30°	818.0	825.4	846.1	865.3	871.2
32.5°	786.9	797.3	819.5	838.7	847.6
35°	755.8	766.2	789.9	813.5	822.4
37.5°	721.8	733.7	757.3	785.4	797.3
40°	689.3	698.2	726.3	760.3	770.6
42.5°	655.3	665.6	695.2	732.2	744.0
45°	618.3	630.1	662.7	701.1	715.9
47.5°	582.8	594.6	630.1	668.6	686.3
50°	545.8	560.6	596.1	640.5	658.2
52.5°	510.3	523.6	563.6	609.4	625.7
55°	470.4	485.2	529.5	576.9	597.6
57.5°	437.8	448.2	497.0	545.8	566.5
60°	397.9	411.2	461.5	513.3	536.9
62.5°	355.0	377.2	429.0	482.2	505.9
65°	319.5	337.2	396.4	448.2	470.4
67.5°	282.5	301.7	359.4	414.2	439.3
70°	241.1	266.2	326.9	381.6	405.3
72.5°	204.1	230.7	292.9	346.1	371.3
75°	167.1	195.2	255.9	307.7	331.3
77.5°	131.6	162.7	221.9	261.8	276.6
80°	97.6	127.2	179.0	207.1	218.9
82.5°	68.0	93.2	131.6	146.4	149.4
85°	42.9	59.2	79.9	88.7	87.3
87.5°	19.2	23.7	29.6	32.5	31.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)