

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: P277241

Luminaire Tested: **22CZ2-34HE-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277241  
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-L82765-W2A1-U-3500K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3128.0 lumens  
Efficiency: N/A  
Efficacy: 121.4 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

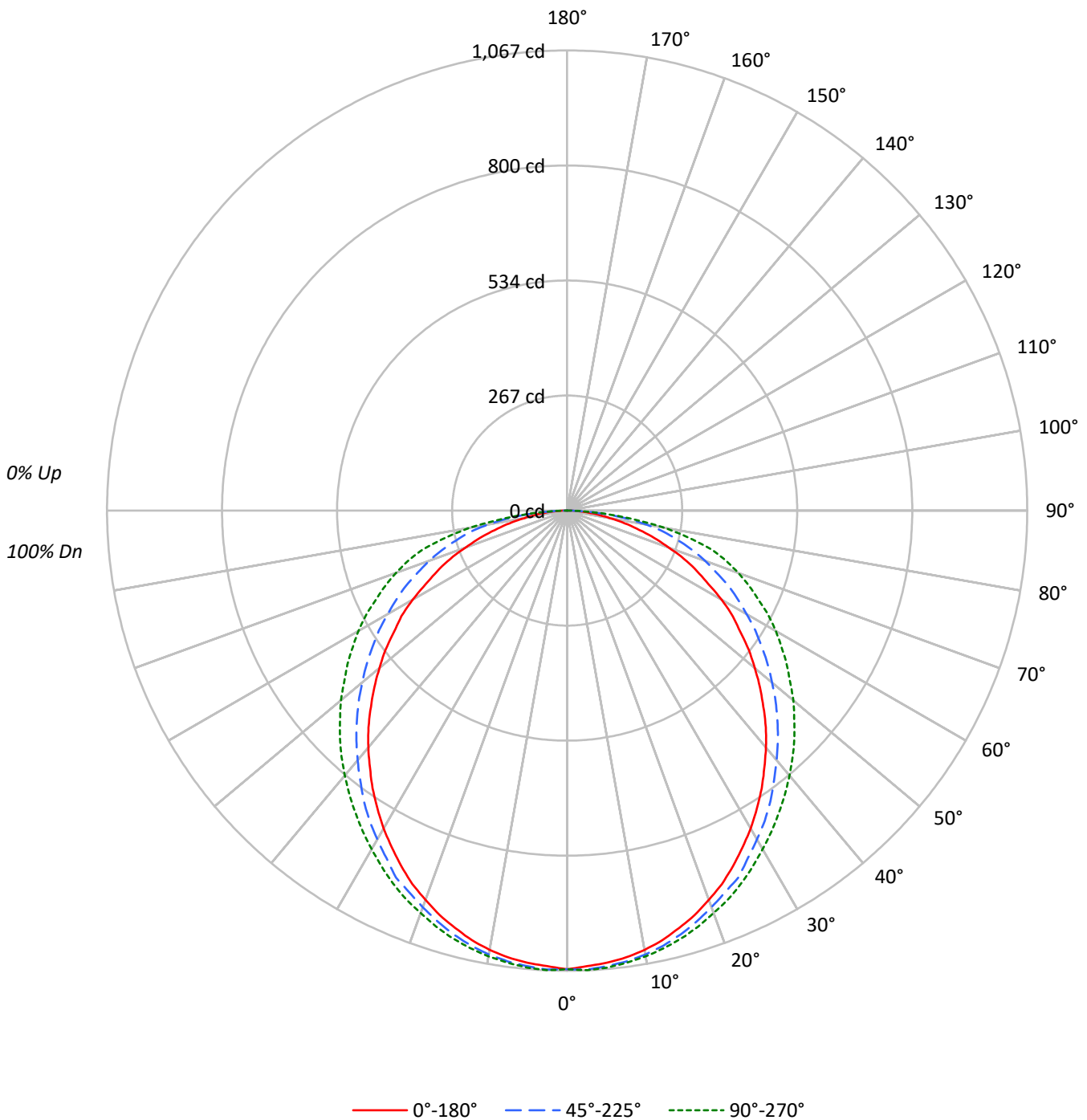
Input Watts (W): 25.761  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2862	2862	2862
5°	2844	2865	2873
10°	2826	2856	2868
15°	2791	2834	2860
20°	2751	2803	2843
25°	2701	2788	2833
30°	2645	2736	2817
35°	2584	2700	2811
40°	2520	2655	2817
45°	2449	2624	2835
50°	2378	2597	2867
55°	2297	2585	2917
60°	2228	2584	3007
65°	2117	2627	3117
70°	1974	2677	3318
75°	1808	2769	3585
80°	1574	2885	3530
85°	1377	2566	2803



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.6	3.2
10°-20°	286.5	9.2
20°-30°	430.1	13.7
30°-40°	513.9	16.4
40°-50°	534.4	17.1
50°-60°	495.3	15.8
60°-70°	406.3	13.0
70°-80°	274.6	8.8
80°-90°	86.3	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°	817.2	26.1
0°-40°	1331.1	42.6
0°-60°	2360.8	75.5
0°-90°	3128.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3128.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1064	1064	1064	1064	1064	
5°	1053	1054	1060	1062	1064	100
15°	1002	1007	1017	1024	1027	283
25°	910	917	939	950	954	419
35°	786	797	822	847	856	492
45°	643	656	690	730	745	497
55°	490	505	551	600	622	440
65°	332	351	412	466	490	329
75°	174	203	266	320	345	184
85°	45	62	83	92	91	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1063.6	1063.6	1063.6	1063.6	1063.6
2.5°	1057.4	1060.5	1065.1	1066.7	1066.7
5°	1052.8	1054.3	1060.5	1062.0	1063.6
7.5°	1045.1	1048.2	1054.3	1055.9	1057.4
10°	1034.3	1037.4	1045.1	1048.2	1049.7
12.5°	1020.5	1023.6	1032.8	1037.4	1039.0
15°	1002.0	1006.6	1017.4	1023.6	1026.6
17.5°	983.5	988.2	998.9	1008.2	1011.2
20°	960.5	971.2	978.9	991.2	992.8
22.5°	937.4	943.5	957.4	969.7	975.8
25°	909.7	917.4	938.9	949.7	954.3
27.5°	880.4	891.2	908.1	925.1	931.2
30°	851.2	858.9	880.4	900.4	906.6
32.5°	818.8	829.6	852.7	872.7	882.0
35°	786.5	797.3	821.9	846.6	855.8
37.5°	751.1	763.4	788.1	817.3	829.6
40°	717.3	726.5	755.7	791.1	801.9
42.5°	681.9	692.6	723.4	761.9	774.2
45°	643.4	655.7	689.6	729.6	745.0
47.5°	606.4	618.8	655.7	695.7	714.2
50°	568.0	583.4	620.3	666.5	684.9
52.5°	531.0	544.9	586.4	634.1	651.1
55°	489.5	504.9	551.0	600.3	621.8
57.5°	455.6	466.4	517.2	568.0	589.5
60°	414.0	427.9	480.2	534.1	558.7
62.5°	369.4	392.5	446.4	501.8	526.4
65°	332.5	350.9	412.5	466.4	489.5
67.5°	294.0	314.0	374.0	431.0	457.1
70°	250.9	277.1	340.2	397.1	421.7
72.5°	212.4	240.1	304.8	360.2	386.3
75°	173.9	203.2	266.3	320.2	344.8
77.5°	137.0	169.3	230.9	272.4	287.8
80°	101.6	132.4	186.2	215.5	227.8
82.5°	70.8	97.0	137.0	152.4	155.5
85°	44.6	61.6	83.1	92.4	90.8
87.5°	20.0	24.6	30.8	33.9	32.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)