

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: P275569

Luminaire Tested: **14CZ2-29-S-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275569  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-29-S-UNV-L83050-W2A1-U-4500K  
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3105.0 lumens  
Efficiency: N/A  
Efficacy: 133.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

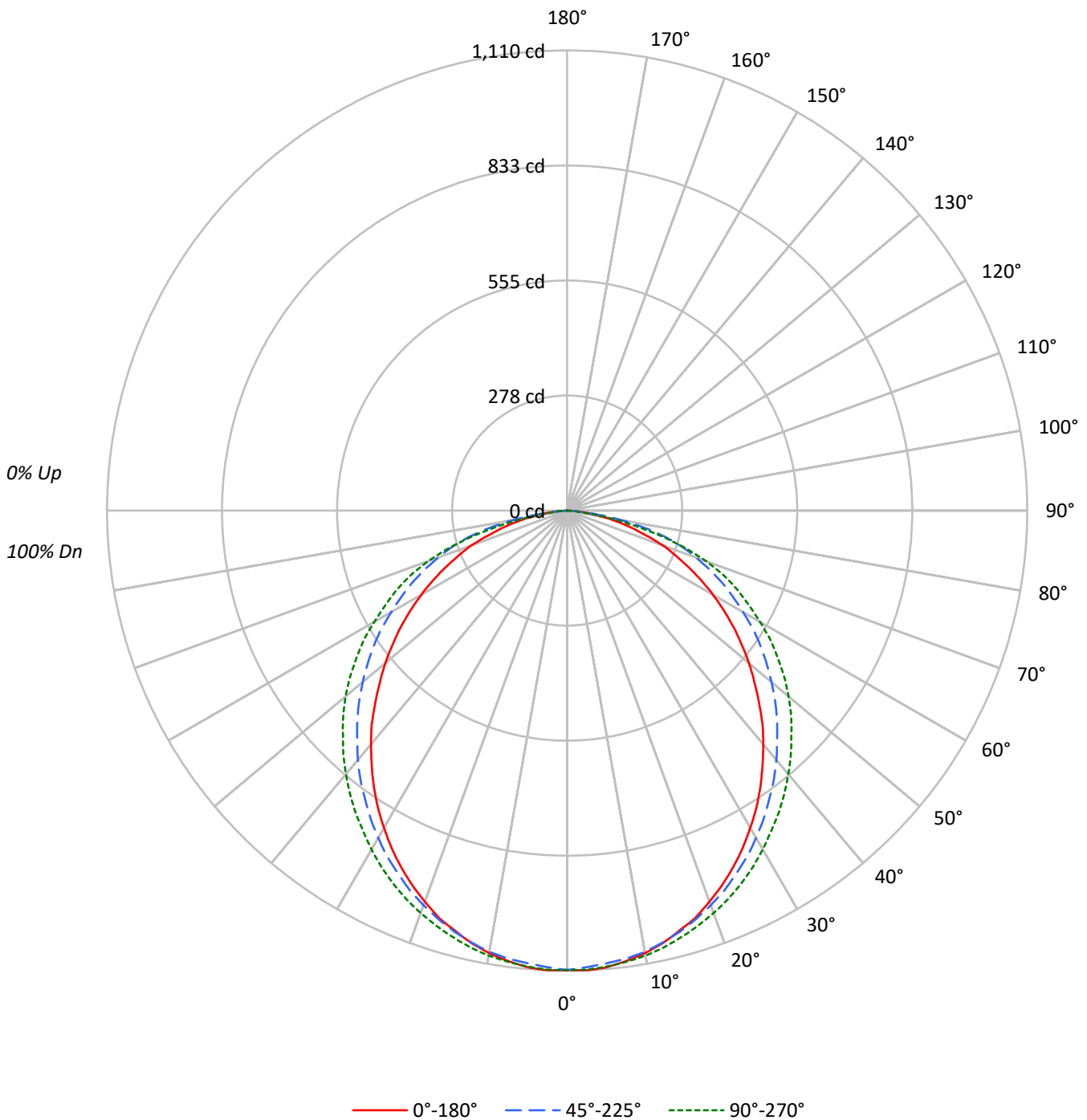
Input Watts (W): 23.25  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84					84			
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70					70			
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58					58			
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50					50			
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43					43			
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38					38			
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	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	52	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

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

	0°	45°	90°
0°	2983	2983	2983
5°	2986	2961	2982
10°	2961	2953	2978
15°	2921	2929	2968
20°	2874	2901	2958
25°	2816	2866	2948
30°	2746	2832	2932
35°	2670	2792	2923
40°	2585	2758	2915
45°	2490	2724	2912
50°	2398	2694	2920
55°	2297	2672	2911
60°	2187	2635	2892
65°	2059	2627	2891
70°	1938	2604	2810
75°	1680	2545	2401
80°	1361	2052	1598
85°	905	713	475



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.7	3.4
10°-20°	297.8	9.6
20°-30°	446.8	14.4
30°-40°	532.9	17.2
40°-50°	551.0	17.7
50°-60°	503.0	16.2
60°-70°	395.9	12.7
70°-80°	230.4	7.4
80°-90°	42.5	1.4
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°	849.3	27.4
0°-40°	1382.2	44.5
0°-60°	2436.2	78.5
0°-90°	3105.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3105.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1108	1108	1108	1108	1108	
5°	1105	1102	1096	1105	1104	105
15°	1048	1050	1052	1065	1065	296
25°	948	953	965	988	993	437
35°	813	824	850	882	890	508
45°	654	676	716	756	765	505
55°	490	516	570	611	620	438
65°	323	357	413	445	454	321
75°	162	200	245	240	231	172
85°	29	42	23	18	15	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1108.4	1108.4	1108.4	1108.4	1108.4
2.5°	1110.0	1106.9	1102.3	1110.0	1108.4
5°	1105.4	1102.3	1096.1	1105.4	1103.8
7.5°	1096.1	1093.0	1090.0	1099.2	1097.7
10°	1083.8	1082.3	1080.7	1091.5	1090.0
12.5°	1068.4	1068.4	1066.9	1079.2	1079.2
15°	1048.4	1049.9	1051.5	1065.3	1065.3
17.5°	1029.9	1028.4	1033.0	1048.4	1049.9
20°	1003.7	1006.8	1013.0	1031.5	1033.0
22.5°	977.6	980.7	991.4	1009.9	1014.5
25°	948.3	952.9	965.3	988.4	993.0
27.5°	917.5	923.7	940.6	965.3	969.9
30°	883.7	892.9	911.4	939.1	943.7
32.5°	849.8	859.0	882.1	909.8	916.0
35°	812.9	823.6	849.8	882.1	889.8
37.5°	774.4	788.2	819.0	851.3	860.6
40°	735.9	751.3	785.1	819.0	829.8
42.5°	697.4	712.8	749.7	788.2	799.0
45°	654.3	675.8	715.9	755.9	765.1
47.5°	612.7	635.8	680.5	720.5	732.8
50°	572.7	595.8	643.5	685.1	697.4
52.5°	531.1	555.8	606.6	649.7	660.4
55°	489.6	515.7	569.6	611.2	620.4
57.5°	448.0	475.7	531.1	571.2	581.9
60°	406.4	435.7	489.6	529.6	537.3
62.5°	364.9	395.6	451.1	486.5	494.2
65°	323.3	357.2	412.6	444.9	454.1
67.5°	283.3	317.1	371.0	401.8	409.5
70°	246.3	277.1	331.0	354.1	357.2
72.5°	200.1	238.6	291.0	303.3	295.6
75°	161.6	200.1	244.8	240.2	230.9
77.5°	123.2	161.6	190.9	175.5	163.2
80°	87.8	126.2	132.4	109.3	103.1
82.5°	57.0	87.8	73.9	57.0	46.2
85°	29.3	41.6	23.1	18.5	15.4
87.5°	9.2	6.2	3.1	3.1	1.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)