

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: P275587

Luminaire Tested: **14CZ2-20-S-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275587  
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: 14CZ2-20-S-UNV-L93050-W2A1-U-3500K  
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1785.0 lumens  
Efficiency: N/A  
Efficacy: 114.2 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

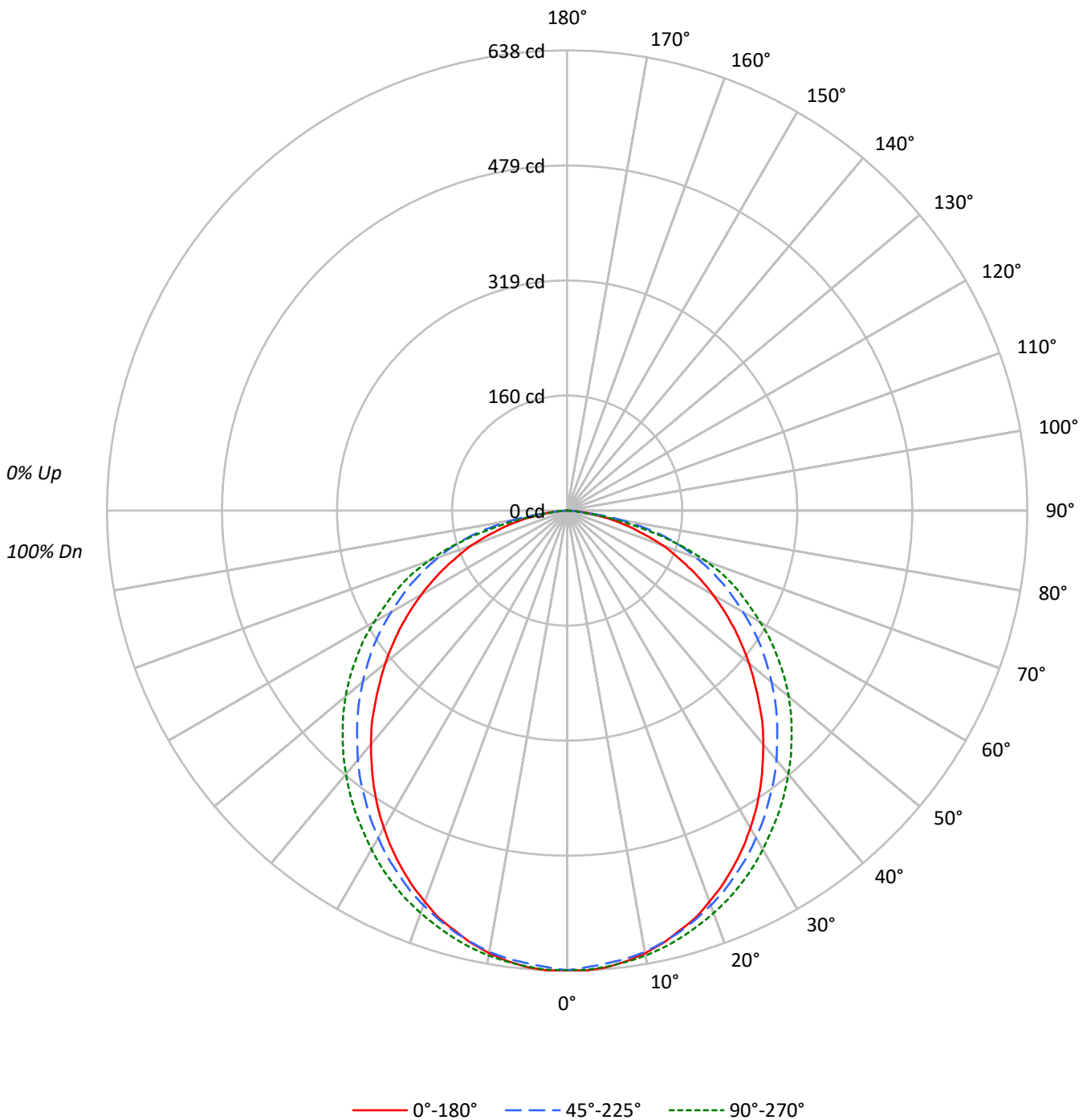
Input Watts (W): 15.624  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1715	1715	1715
5°	1716	1702	1714
10°	1703	1698	1712
15°	1679	1684	1706
20°	1652	1668	1700
25°	1619	1648	1695
30°	1578	1628	1686
35°	1535	1605	1680
40°	1486	1586	1676
45°	1431	1566	1674
50°	1378	1549	1678
55°	1320	1536	1673
60°	1257	1514	1662
65°	1184	1510	1663
70°	1114	1497	1615
75°	966	1463	1381
80°	781	1179	919
85°	519	411	275



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.2	3.4
10°-20°	171.2	9.6
20°-30°	256.8	14.4
30°-40°	306.4	17.2
40°-50°	316.7	17.7
50°-60°	289.2	16.2
60°-70°	227.6	12.7
70°-80°	132.5	7.4
80°-90°	24.4	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°	488.2	27.4
0°-40°	794.6	44.5
0°-60°	1400.5	78.5
0°-90°	1785.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1785.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	637	637	637	637	637	
5°	635	634	630	635	635	60
15°	603	604	604	612	612	170
25°	545	548	555	568	571	251
35°	467	474	488	507	512	292
45°	376	388	412	434	440	290
55°	281	296	328	351	357	252
65°	186	205	237	256	261	185
75°	93	115	141	138	133	99
85°	17	24	13	11	9	22
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	637.2	637.2	637.2	637.2	637.2
2.5°	638.1	636.3	633.7	638.1	637.2
5°	635.4	633.7	630.1	635.4	634.6
7.5°	630.1	628.4	626.6	631.9	631.0
10°	623.1	622.2	621.3	627.5	626.6
12.5°	614.2	614.2	613.3	620.4	620.4
15°	602.7	603.6	604.5	612.4	612.4
17.5°	592.1	591.2	593.8	602.7	603.6
20°	577.0	578.8	582.3	593.0	593.8
22.5°	562.0	563.8	570.0	580.6	583.2
25°	545.2	547.8	554.9	568.2	570.8
27.5°	527.5	531.0	540.7	554.9	557.6
30°	508.0	513.3	523.9	539.9	542.5
32.5°	488.5	493.8	507.1	523.0	526.6
35°	467.3	473.5	488.5	507.1	511.5
37.5°	445.2	453.1	470.8	489.4	494.7
40°	423.0	431.9	451.4	470.8	477.0
42.5°	400.9	409.8	431.0	453.1	459.3
45°	376.1	388.5	411.5	434.5	439.9
47.5°	352.2	365.5	391.2	414.2	421.3
50°	329.2	342.5	369.9	393.8	400.9
52.5°	305.3	319.5	348.7	373.5	379.7
55°	281.4	296.5	327.5	351.4	356.7
57.5°	257.5	273.5	305.3	328.3	334.5
60°	233.6	250.5	281.4	304.4	308.9
62.5°	209.8	227.5	259.3	279.7	284.1
65°	185.9	205.3	237.2	255.8	261.1
67.5°	162.8	182.3	213.3	231.0	235.4
70°	141.6	159.3	190.3	203.6	205.3
72.5°	115.1	137.2	167.3	174.3	169.9
75°	92.9	115.1	140.7	138.1	132.8
77.5°	70.8	92.9	109.7	100.9	93.8
80°	50.4	72.6	76.1	62.8	59.3
82.5°	32.7	50.4	42.5	32.7	26.6
85°	16.8	23.9	13.3	10.6	8.9
87.5°	5.3	3.5	1.8	1.8	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)