

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: P258570

Luminaire Tested: **14CZ-LD5-20-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258570  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35573)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ-LD5-20-UNV-L93050-W2A1-U-5000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1969.0 lumens  
Efficiency: N/A  
Efficacy: 123.1 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

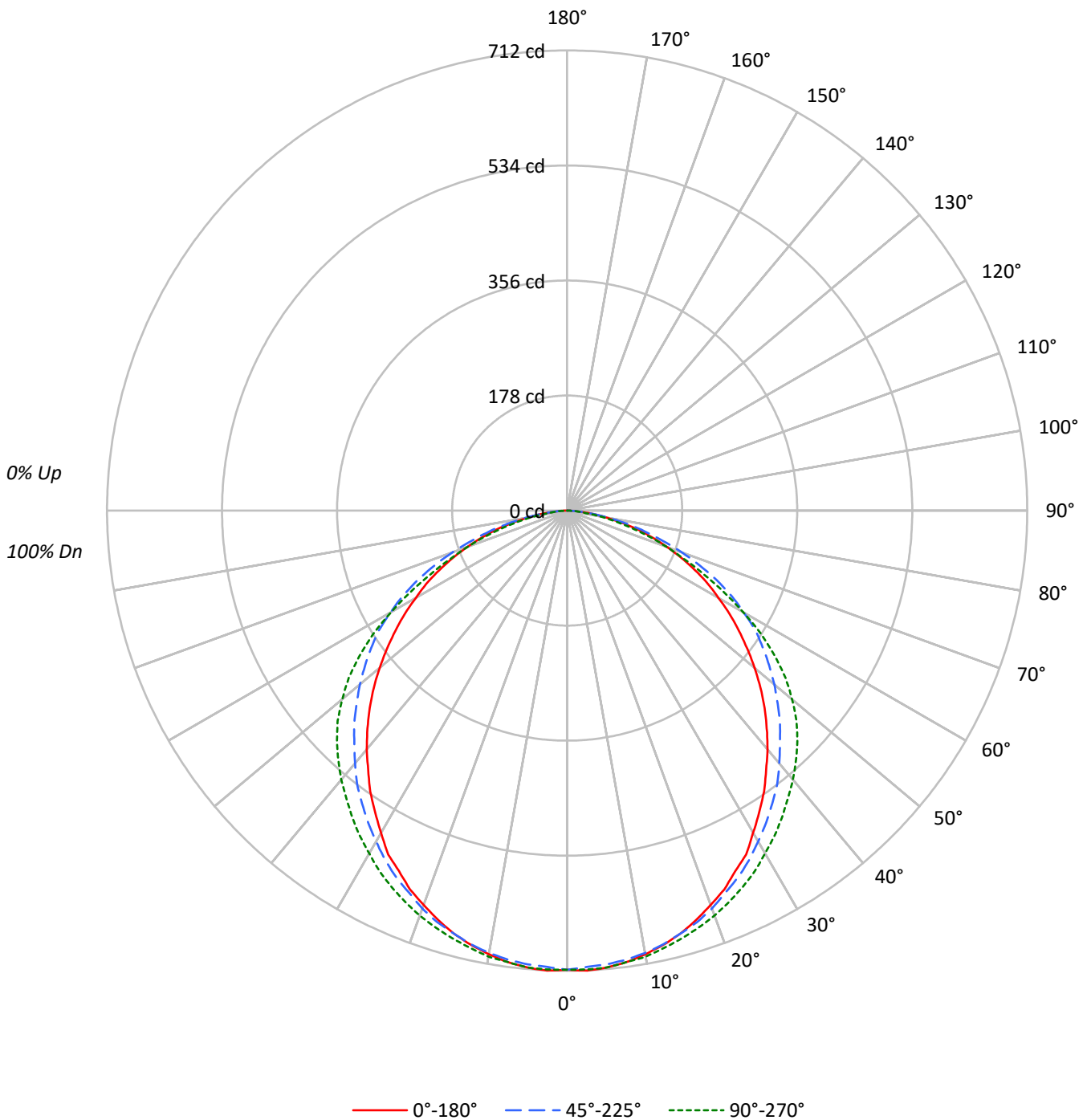
Input Watts (W): 15.996  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	90	80	72	66	88	78	71	65	75	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	36	34
8	61	47	39	33	59	46	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	29	42	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26	25

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

	0°	45°	90°
0°	1912	1912	1912
5°	1917	1904	1917
10°	1905	1899	1915
15°	1888	1888	1909
20°	1860	1876	1910
25°	1827	1859	1908
30°	1789	1837	1903
35°	1744	1818	1904
40°	1695	1794	1910
45°	1644	1773	1917
50°	1585	1752	1902
55°	1521	1735	1840
60°	1457	1698	1693
65°	1391	1626	1484
70°	1290	1482	1283
75°	1171	1292	1059
80°	933	1023	783
85°	661	568	451



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.2	3.4
10°-20°	192.1	9.8
20°-30°	289.6	14.7
30°-40°	347.1	17.6
40°-50°	360.2	18.3
50°-60°	324.9	16.5
60°-70°	237.0	12.0
70°-80°	124.3	6.3
80°-90°	26.5	1.3
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°	548.9	27.9
0°-40°	896.0	45.5
0°-60°	1581.1	80.3
0°-90°	1969.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1969.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	711	711	711	711	711	
5°	710	708	705	710	710	67
15°	678	678	678	685	685	191
25°	615	618	626	640	643	284
35°	531	537	553	574	580	332
45°	432	441	466	494	504	333
55°	324	336	370	394	392	290
65°	218	231	255	246	233	216
75°	113	128	124	108	102	118
85°	21	26	18	16	15	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	710.6	710.6	710.6	710.6	710.6
2.5°	712.5	710.6	706.7	710.6	710.6
5°	709.6	707.6	704.7	709.6	709.6
7.5°	704.7	702.8	700.8	705.7	704.7
10°	697.0	696.0	695.0	700.8	700.8
12.5°	688.2	688.2	687.3	694.1	693.1
15°	677.6	677.6	677.6	685.3	685.3
17.5°	664.0	665.9	667.8	676.6	676.6
20°	649.4	651.3	655.2	665.9	666.9
22.5°	634.8	635.8	639.7	652.3	655.2
25°	615.4	618.3	626.1	639.7	642.6
27.5°	599.9	600.9	609.6	625.1	629.0
30°	575.6	582.4	591.2	608.6	612.5
32.5°	553.3	559.1	572.7	591.2	597.0
35°	531.0	536.8	553.3	573.7	579.5
37.5°	505.7	514.5	533.9	554.3	561.1
40°	482.4	490.2	510.6	535.8	543.6
42.5°	457.2	465.0	487.3	515.4	524.2
45°	432.0	440.7	465.9	494.1	503.8
47.5°	405.8	415.5	441.7	472.7	481.5
50°	378.6	389.3	418.4	450.4	454.3
52.5°	351.4	363.0	394.1	422.3	426.1
55°	324.2	335.9	369.8	394.1	392.2
57.5°	298.0	310.6	345.6	358.2	356.2
60°	270.8	284.4	315.5	321.3	314.5
62.5°	245.6	258.2	287.3	282.5	273.7
65°	218.4	231.0	255.3	245.6	233.0
67.5°	191.2	206.8	222.3	205.8	196.1
70°	164.0	181.5	188.3	171.8	163.1
72.5°	137.8	156.3	154.3	137.8	132.0
75°	112.6	128.1	124.3	107.7	101.9
77.5°	85.4	102.9	94.2	80.6	75.7
80°	60.2	75.7	66.0	54.4	50.5
82.5°	39.8	50.5	40.8	32.0	29.1
85°	21.4	26.2	18.4	15.5	14.6
87.5°	8.7	7.8	6.8	6.8	5.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)