

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: P258568

Luminaire Tested: **14CZ-LD5-20-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258568  
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-4000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1935.0 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

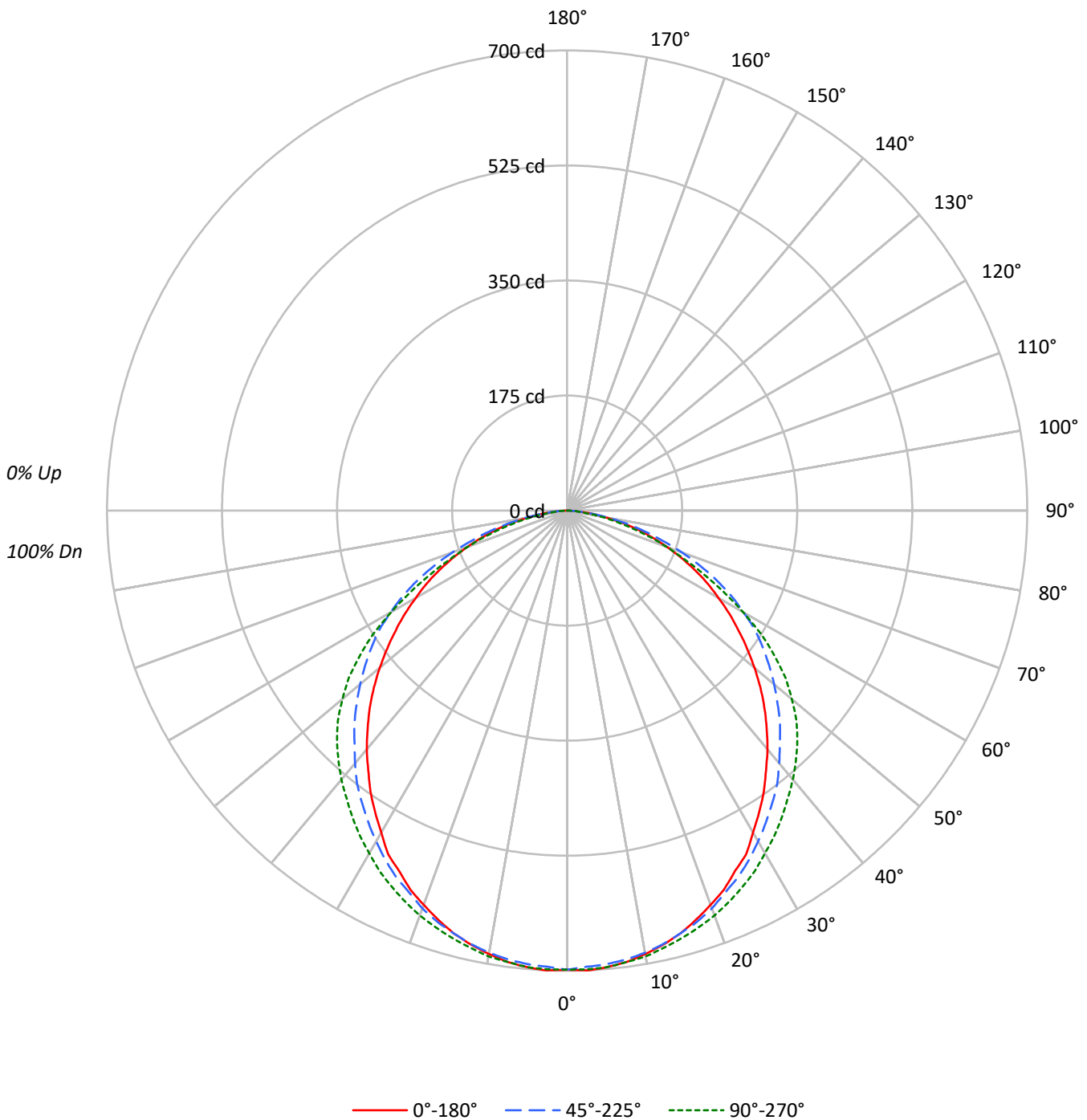
Input Watts (W): 15.717  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1879	1879	1879
5°	1884	1871	1884
10°	1871	1866	1882
15°	1855	1855	1876
20°	1828	1844	1877
25°	1796	1827	1875
30°	1758	1805	1870
35°	1714	1786	1871
40°	1665	1763	1877
45°	1615	1743	1884
50°	1557	1721	1869
55°	1495	1705	1808
60°	1433	1668	1664
65°	1366	1598	1457
70°	1268	1456	1261
75°	1151	1269	1042
80°	916	1006	769
85°	648	559	442



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.1	3.4
10°-20°	188.7	9.8
20°-30°	284.6	14.7
30°-40°	341.1	17.6
40°-50°	354.0	18.3
50°-60°	319.3	16.5
60°-70°	232.9	12.0
70°-80°	122.2	6.3
80°-90°	26.1	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°	539.4	27.9
0°-40°	880.5	45.5
0°-60°	1553.8	80.3
0°-90°	1935.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1935.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	698	698	698	698	698	
5°	697	695	693	697	697	66
15°	666	666	666	674	674	188
25°	605	608	615	629	632	279
35°	522	528	544	564	570	326
45°	424	433	458	486	495	327
55°	319	330	364	387	385	285
65°	215	227	251	241	229	212
75°	111	126	122	106	100	116
85°	21	26	18	15	14	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	698.3	698.3	698.3	698.3	698.3
2.5°	700.2	698.3	694.5	698.3	698.3
5°	697.3	695.4	692.6	697.3	697.3
7.5°	692.6	690.7	688.7	693.5	692.6
10°	684.9	684.0	683.0	688.7	688.7
12.5°	676.3	676.3	675.4	682.1	681.1
15°	665.9	665.9	665.9	673.5	673.5
17.5°	652.5	654.4	656.3	664.9	664.9
20°	638.2	640.1	643.9	654.4	655.4
22.5°	623.9	624.8	628.6	641.1	643.9
25°	604.8	607.7	615.3	628.6	631.5
27.5°	589.5	590.5	599.1	614.3	618.2
30°	565.7	572.4	581.0	598.1	601.9
32.5°	543.7	549.5	562.8	581.0	586.7
35°	521.8	527.5	543.7	563.8	569.5
37.5°	497.0	505.6	524.7	544.7	551.4
40°	474.1	481.7	501.8	526.6	534.2
42.5°	449.3	456.9	478.9	506.5	515.1
45°	424.5	433.1	457.9	485.6	495.1
47.5°	398.7	408.3	434.0	464.6	473.2
50°	372.0	382.5	411.1	442.6	446.4
52.5°	345.3	356.8	387.3	415.0	418.8
55°	318.6	330.1	363.5	387.3	385.4
57.5°	292.9	305.3	339.6	352.0	350.1
60°	266.2	279.5	310.0	315.8	309.1
62.5°	241.3	253.7	282.4	277.6	269.0
65°	214.6	227.0	250.9	241.3	228.9
67.5°	187.9	203.2	218.5	202.2	192.7
70°	161.2	178.4	185.1	168.8	160.3
72.5°	135.5	153.6	151.7	135.5	129.7
75°	110.7	125.9	122.1	105.9	100.2
77.5°	83.9	101.1	92.5	79.2	74.4
80°	59.1	74.4	64.9	53.4	49.6
82.5°	39.1	49.6	40.1	31.5	28.6
85°	21.0	25.8	18.1	15.3	14.3
87.5°	8.6	7.6	6.7	6.7	5.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)