

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: P259159

Luminaire Tested: **14CZ-LD5-20-SQP-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259159  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35908)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ-LD5-20-SQP-UNV-L92765-W2A1-U-5000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1257.0 lumens  
Efficiency: N/A  
Efficacy: 80.0 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

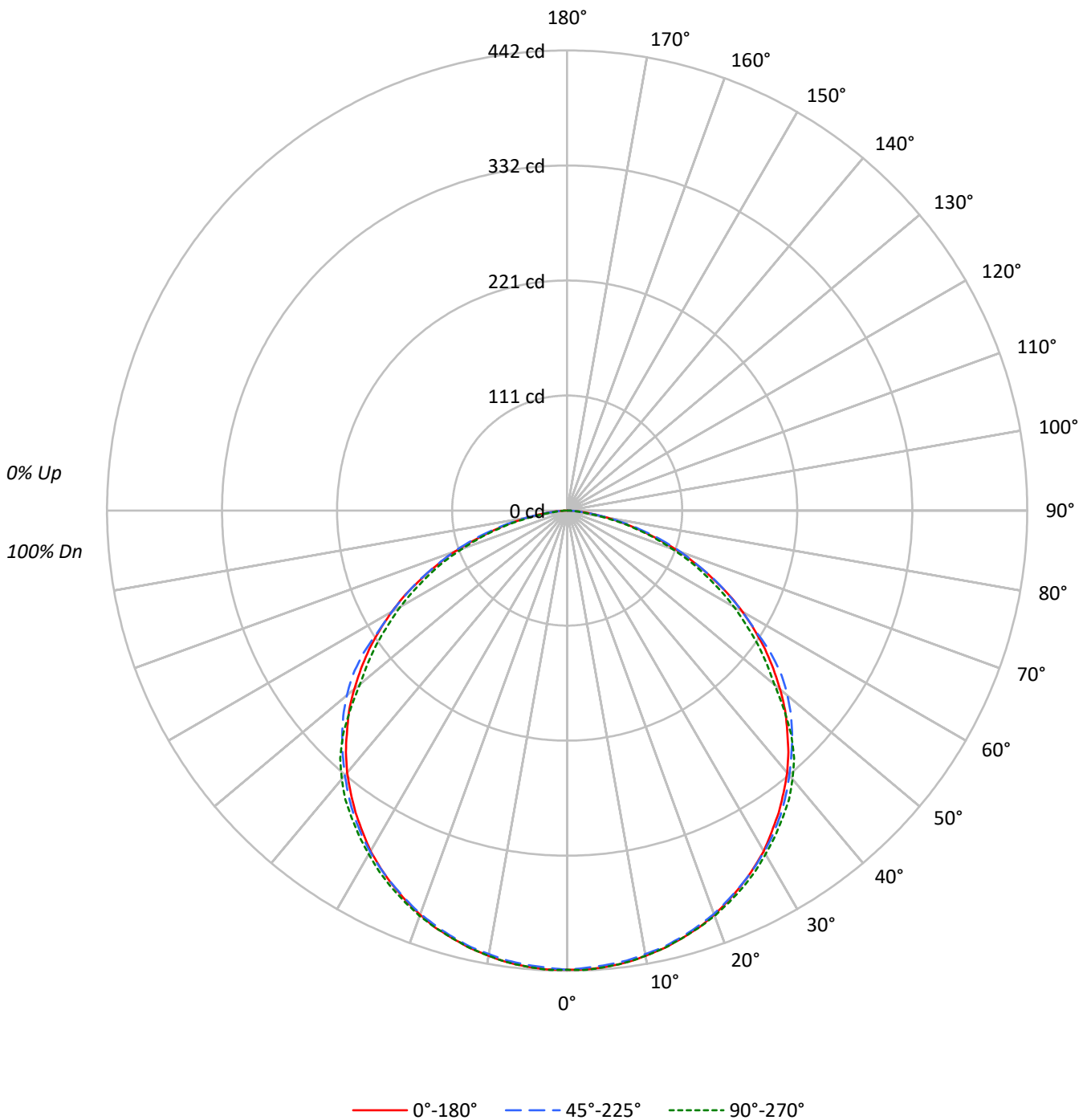
Input Watts (W): 15.717  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	65	88	78	71	65	75	69	64	73	67	63	70	65	62	59
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	50	46	44
6	70	57	48	42	68	56	48	41	54	47	41	52	46	41	51	45	40	38
7	65	52	43	37	63	51	42	37	49	42	36	48	41	36	46	40	36	34
8	61	47	39	33	59	46	38	33	45	38	32	44	37	32	43	37	32	30
9	57	43	35	29	55	43	35	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	1187	1187	1187
5°	1188	1183	1188
10°	1187	1182	1187
15°	1185	1182	1185
20°	1183	1180	1186
25°	1178	1177	1186
30°	1174	1176	1184
35°	1164	1173	1185
40°	1155	1167	1183
45°	1137	1163	1158
50°	1118	1157	1087
55°	1088	1121	1047
60°	1047	1045	997
65°	981	987	933
70°	901	911	844
75°	757	792	722
80°	600	614	508
85°	395	343	290



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.8	3.3
10°-20°	120.1	9.6
20°-30°	183.3	14.6
30°-40°	223.7	17.8
40°-50°	233.9	18.6
50°-60°	207.1	16.5
60°-70°	152.5	12.1
70°-80°	78.9	6.3
80°-90°	15.7	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°	345.2	27.5
0°-40°	568.9	45.3
0°-60°	1009.8	80.3
0°-90°	1257.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1257.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	441	441	441	441	441	
5°	440	440	438	440	440	42
15°	425	425	424	426	425	120
25°	397	397	396	399	399	183
35°	354	355	357	361	361	222
45°	299	301	306	308	304	231
55°	232	237	239	226	223	207
65°	154	164	155	149	146	153
75°	73	78	76	72	69	78
85°	13	14	11	10	9	17
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	441.1	441.1	441.1	441.1	441.1
2.5°	441.1	441.1	439.4	441.1	441.5
5°	439.8	439.8	438.1	439.8	439.8
7.5°	437.7	437.3	436.0	437.7	437.7
10°	434.3	434.3	432.6	434.7	434.3
12.5°	430.5	430.0	429.2	430.9	430.5
15°	425.3	425.3	424.1	425.8	425.3
17.5°	420.2	419.8	418.5	420.2	420.2
20°	413.0	412.6	412.2	413.9	414.3
22.5°	405.3	404.9	404.5	407.0	407.0
25°	396.8	396.8	396.4	399.0	399.4
27.5°	387.5	387.5	387.9	391.3	390.9
30°	377.7	377.7	378.5	381.1	381.1
32.5°	365.7	366.6	368.3	371.3	371.3
35°	354.2	355.1	357.2	360.6	360.6
37.5°	341.5	342.7	344.9	349.1	350.0
40°	328.7	329.6	332.1	336.8	336.8
42.5°	314.6	315.5	318.9	323.6	322.7
45°	298.9	301.4	305.7	308.3	304.4
47.5°	284.0	285.7	291.7	288.7	282.3
50°	267.0	270.4	276.3	265.7	259.7
52.5°	249.5	253.3	259.7	244.8	241.4
55°	232.0	236.7	238.9	226.5	223.1
57.5°	213.3	218.4	214.2	206.9	203.5
60°	194.6	200.5	194.2	187.3	185.2
62.5°	175.0	181.8	174.6	168.6	165.6
65°	154.1	163.5	155.0	149.0	146.5
67.5°	133.7	143.5	134.5	129.4	127.7
70°	114.5	120.1	115.8	110.7	107.3
72.5°	91.5	97.1	96.2	90.7	88.6
75°	72.8	77.9	76.2	71.5	69.4
77.5°	54.1	59.6	57.9	52.4	51.5
80°	38.7	42.6	39.6	34.5	32.8
82.5°	24.3	27.2	23.4	19.6	18.7
85°	12.8	13.6	11.1	9.8	9.4
87.5°	4.3	4.7	4.7	4.3	4.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)