

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: P259072

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259072  
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-L93050-W2A1-U-4000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1248.0 lumens  
Efficiency: N/A  
Efficacy: 79.4 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

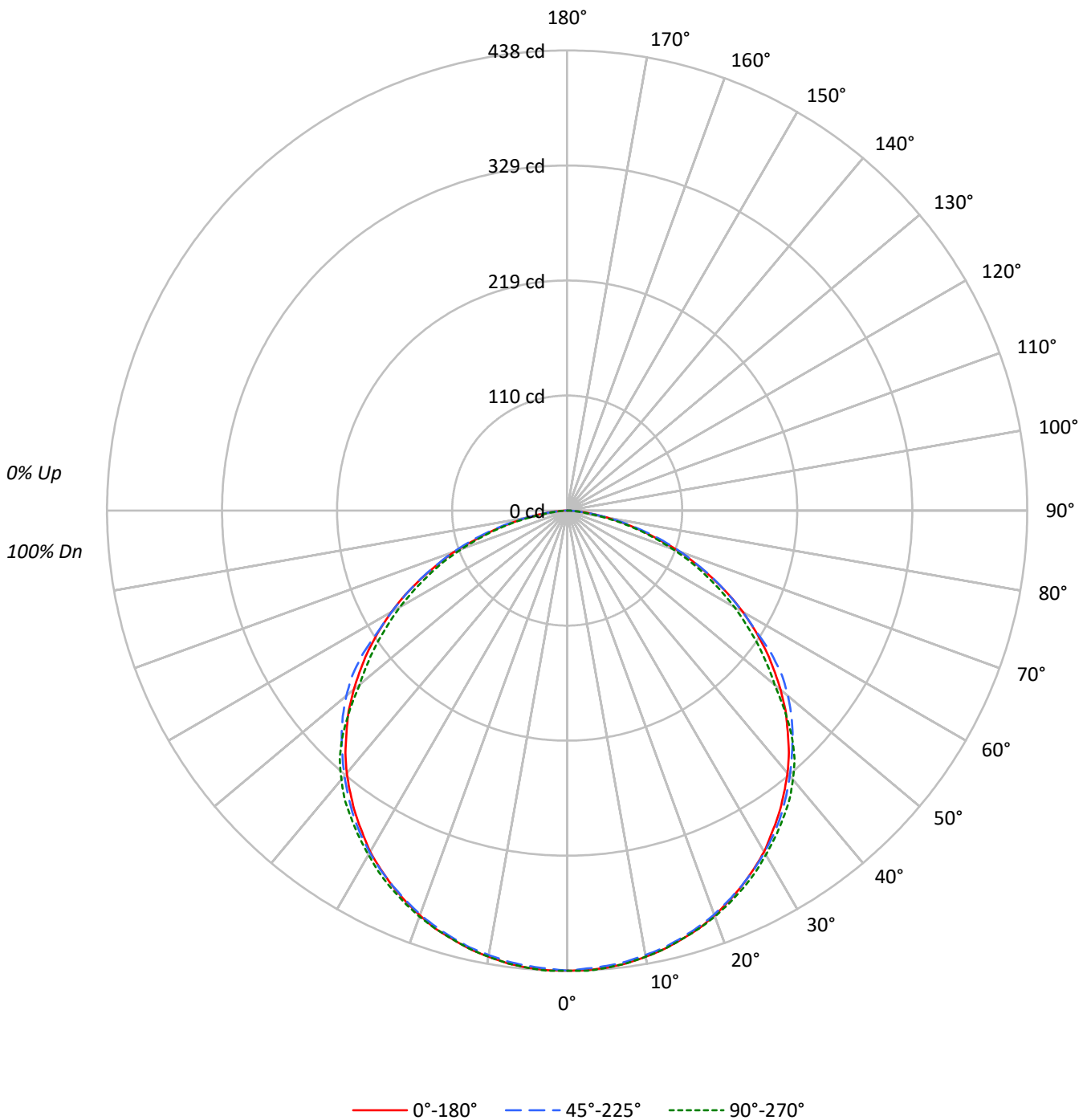
Input Watts (W): 15.717  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P259072

CATALOG NUMBER: 14CZ-LD5-20-SQP-UNV-L93050-W2A1-U-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P259072

CATALOG NUMBER: 14CZ-LD5-20-SQP-UNV-L93050-W2A1-U-4000K

**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°	1178	1178	1178
5°	1180	1175	1180
10°	1178	1174	1178
15°	1176	1173	1176
20°	1174	1172	1178
25°	1170	1169	1177
30°	1165	1168	1175
35°	1155	1165	1176
40°	1146	1158	1175
45°	1130	1155	1150
50°	1109	1148	1080
55°	1081	1112	1039
60°	1040	1038	990
65°	974	980	926
70°	895	905	838
75°	752	787	716
80°	597	609	504
85°	392	340	287



TEST NUMBER: P259072

CATALOG NUMBER: 14CZ-LD5-20-SQP-UNV-L93050-W2A1-U-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.5	3.3
10°-20°	119.2	9.6
20°-30°	182.0	14.6
30°-40°	222.1	17.8
40°-50°	232.2	18.6
50°-60°	205.6	16.5
60°-70°	151.4	12.1
70°-80°	78.4	6.3
80°-90°	15.6	1.2
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°	342.7	27.5
0°-40°	564.8	45.3
0°-60°	1002.6	80.3
0°-90°	1248.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1248.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	438	438	438	438	438	
5°	437	437	435	437	437	42
15°	422	422	421	423	422	119
25°	394	394	394	396	396	182
35°	352	353	355	358	358	220
45°	297	299	304	306	302	229
55°	230	235	237	225	222	206
65°	153	162	154	148	145	152
75°	72	77	76	71	69	77
85°	13	14	11	10	9	16
90°	0	0	0	0	0	



TEST NUMBER: P259072

CATALOG NUMBER: 14CZ-LD5-20-SQP-UNV-L93050-W2A1-U-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	437.9	437.9	437.9	437.9	437.9
2.5°	437.9	437.9	436.3	437.9	438.4
5°	436.7	436.7	435.0	436.7	436.7
7.5°	434.6	434.1	432.9	434.6	434.6
10°	431.2	431.2	429.5	431.6	431.2
12.5°	427.4	427.0	426.1	427.8	427.4
15°	422.3	422.3	421.0	422.7	422.3
17.5°	417.2	416.8	415.5	417.2	417.2
20°	410.0	409.6	409.2	410.9	411.3
22.5°	402.4	402.0	401.6	404.1	404.1
25°	394.0	394.0	393.6	396.1	396.5
27.5°	384.7	384.7	385.1	388.5	388.1
30°	375.0	375.0	375.8	378.3	378.3
32.5°	363.1	364.0	365.7	368.6	368.6
35°	351.7	352.6	354.7	358.0	358.0
37.5°	339.0	340.3	342.4	346.6	347.5
40°	326.3	327.2	329.7	334.4	334.4
42.5°	312.4	313.2	316.6	321.3	320.4
45°	296.8	299.3	303.5	306.1	302.2
47.5°	282.0	283.6	289.6	286.6	280.3
50°	265.0	268.4	274.3	263.8	257.9
52.5°	247.7	251.5	257.9	243.1	239.7
55°	230.4	235.0	237.1	224.9	221.5
57.5°	211.8	216.9	212.6	205.4	202.1
60°	193.2	199.1	192.8	186.0	183.9
62.5°	173.7	180.5	173.3	167.4	164.4
65°	153.0	162.3	153.9	148.0	145.4
67.5°	132.7	142.5	133.6	128.5	126.8
70°	113.7	119.2	115.0	109.9	106.5
72.5°	90.9	96.4	95.5	90.0	87.9
75°	72.3	77.4	75.7	71.0	68.9
77.5°	53.7	59.2	57.5	52.0	51.1
80°	38.5	42.3	39.3	34.2	32.5
82.5°	24.1	27.1	23.2	19.4	18.6
85°	12.7	13.5	11.0	9.7	9.3
87.5°	4.2	4.6	4.6	4.2	4.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)