

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: P259071

Luminaire Tested: **14CZ-LD5-20-SQP-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259071
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-3500K
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SQP LENS
Light Source: (168) 90 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1156.0 lumens
Efficiency: N/A
Efficacy: 74.0 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

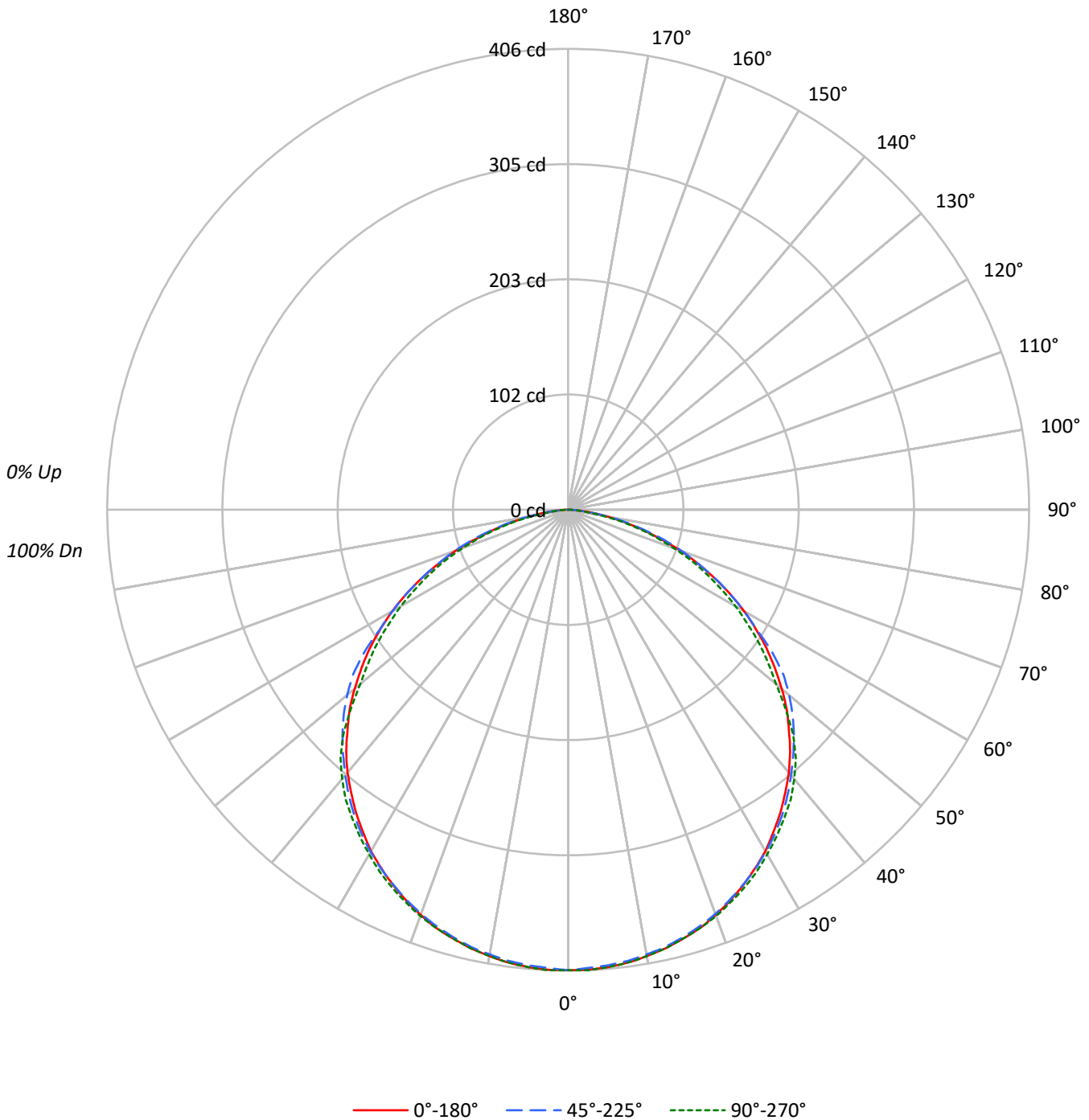
Input Watts (W): 15.624
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P259071

CATALOG NUMBER: 14CZ-LD5-20-SQP-UNV-L93050-W2A1-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P259071

CATALOG NUMBER: 14CZ-LD5-20-SQP-UNV-L93050-W2A1-U-3500K

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°	1092	1092	1092
5°	1093	1088	1093
10°	1091	1087	1091
15°	1090	1087	1090
20°	1088	1085	1091
25°	1083	1082	1091
30°	1079	1082	1089
35°	1070	1079	1090
40°	1062	1073	1088
45°	1046	1070	1066
50°	1028	1064	1000
55°	1001	1031	963
60°	963	961	917
65°	902	907	858
70°	828	838	777
75°	697	729	663
80°	552	564	468
85°	361	315	266



TEST NUMBER: P259071

CATALOG NUMBER: 14CZ-LD5-20-SQP-UNV-L93050-W2A1-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.4	3.3
10°-20°	110.4	9.6
20°-30°	168.6	14.6
30°-40°	205.7	17.8
40°-50°	215.1	18.6
50°-60°	190.4	16.5
60°-70°	140.2	12.1
70°-80°	72.6	6.3
80°-90°	14.5	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°	317.4	27.5
0°-40°	523.1	45.3
0°-60°	928.7	80.3
0°-90°	1156.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1156.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	406	406	406	406	406	
5°	404	404	403	404	404	38
15°	391	391	390	392	391	111
25°	365	365	364	367	367	168
35°	326	327	328	332	332	204
45°	275	277	281	284	280	212
55°	213	218	220	208	205	190
65°	142	150	142	137	135	140
75°	67	72	70	66	64	71
85°	12	12	10	9	9	15
90°	0	0	0	0	0	



TEST NUMBER: P259071

CATALOG NUMBER: 14CZ-LD5-20-SQP-UNV-L93050-W2A1-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	405.7	405.7	405.7	405.7	405.7
2.5°	405.7	405.7	404.1	405.7	406.1
5°	404.5	404.5	402.9	404.5	404.5
7.5°	402.5	402.1	401.0	402.5	402.5
10°	399.4	399.4	397.8	399.8	399.4
12.5°	395.9	395.5	394.7	396.3	395.9
15°	391.2	391.2	390.0	391.6	391.2
17.5°	386.5	386.1	384.9	386.5	386.5
20°	379.8	379.4	379.0	380.6	381.0
22.5°	372.8	372.4	372.0	374.3	374.3
25°	364.9	364.9	364.5	366.9	367.3
27.5°	356.3	356.3	356.7	359.8	359.5
30°	347.3	347.3	348.1	350.5	350.5
32.5°	336.4	337.1	338.7	341.4	341.4
35°	325.8	326.6	328.5	331.7	331.7
37.5°	314.0	315.2	317.2	321.1	321.9
40°	302.3	303.1	305.4	309.7	309.7
42.5°	289.4	290.1	293.3	297.6	296.8
45°	274.9	277.2	281.1	283.5	280.0
47.5°	261.2	262.7	268.2	265.5	259.6
50°	245.5	248.6	254.1	244.3	238.9
52.5°	229.5	233.0	238.9	225.1	222.0
55°	213.4	217.7	219.7	208.3	205.2
57.5°	196.2	200.9	197.0	190.3	187.2
60°	178.9	184.4	178.6	172.3	170.3
62.5°	160.9	167.2	160.5	155.1	152.3
65°	141.7	150.4	142.5	137.0	134.7
67.5°	123.0	132.0	123.7	119.0	117.5
70°	105.3	110.4	106.5	101.8	98.7
72.5°	84.2	89.3	88.5	83.4	81.4
75°	67.0	71.7	70.1	65.8	63.8
77.5°	49.7	54.8	53.3	48.2	47.4
80°	35.6	39.2	36.4	31.7	30.2
82.5°	22.3	25.1	21.5	18.0	17.2
85°	11.7	12.5	10.2	9.0	8.6
87.5°	3.9	4.3	4.3	3.9	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)