

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: P259070

Luminaire Tested: **14CZ-LD5-20-SQP-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259070
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-3000K
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER
WITH SQP LENS
Light Source: (168) 90 CRI LEDS TUNED AT 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1058.0 lumens
Efficiency: N/A
Efficacy: 67.3 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

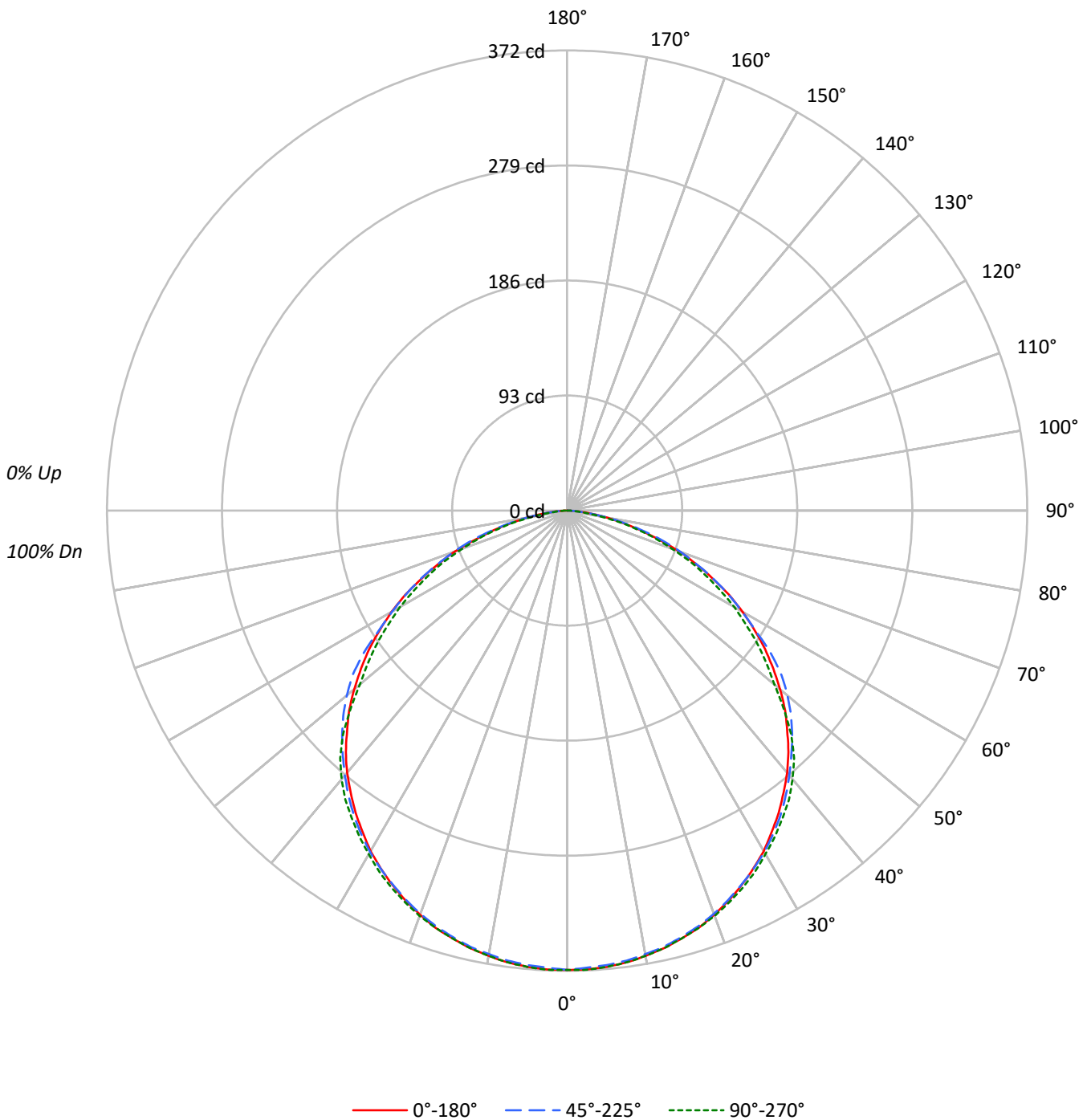
Input Watts (W): 15.717
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P259070

CATALOG NUMBER: 14CZ-LD5-20-SQP-UNV-L93050-W2A1-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P259070

CATALOG NUMBER: 14CZ-LD5-20-SQP-UNV-L93050-W2A1-U-3000K

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°	999	999	999
5°	1000	996	1000
10°	999	995	999
15°	997	994	997
20°	995	993	999
25°	992	991	998
30°	988	990	997
35°	980	988	997
40°	972	982	996
45°	957	979	975
50°	941	974	915
55°	916	943	881
60°	882	879	839
65°	826	830	785
70°	758	767	710
75°	637	666	607
80°	505	516	428
85°	333	287	244



TEST NUMBER: P259070

CATALOG NUMBER: 14CZ-LD5-20-SQP-UNV-L93050-W2A1-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.2	3.3
10°-20°	101.1	9.6
20°-30°	154.3	14.6
30°-40°	188.3	17.8
40°-50°	196.9	18.6
50°-60°	174.3	16.5
60°-70°	128.3	12.1
70°-80°	66.4	6.3
80°-90°	13.2	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°	290.5	27.5
0°-40°	478.8	45.3
0°-60°	850.0	80.3
0°-90°	1058.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1058.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	371	371	371	371	371	
5°	370	370	369	370	370	35
15°	358	358	357	358	358	101
25°	334	334	334	336	336	154
35°	298	299	301	304	304	186
45°	252	254	257	260	256	194
55°	195	199	201	191	188	174
65°	130	138	130	125	123	129
75°	61	66	64	60	58	65
85°	11	12	9	8	8	14
90°	0	0	0	0	0	



TEST NUMBER: P259070

CATALOG NUMBER: 14CZ-LD5-20-SQP-UNV-L93050-W2A1-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	371.3	371.3	371.3	371.3	371.3
2.5°	371.3	371.3	369.8	371.3	371.6
5°	370.2	370.2	368.8	370.2	370.2
7.5°	368.4	368.0	367.0	368.4	368.4
10°	365.5	365.5	364.1	365.9	365.5
12.5°	362.3	362.0	361.2	362.7	362.3
15°	358.0	358.0	356.9	358.4	358.0
17.5°	353.7	353.4	352.3	353.7	353.7
20°	347.6	347.3	346.9	348.3	348.7
22.5°	341.2	340.8	340.5	342.6	342.6
25°	334.0	334.0	333.6	335.8	336.2
27.5°	326.1	326.1	326.5	329.3	329.0
30°	317.9	317.9	318.6	320.7	320.7
32.5°	307.8	308.6	310.0	312.5	312.5
35°	298.2	298.9	300.7	303.5	303.5
37.5°	287.4	288.5	290.3	293.9	294.6
40°	276.7	277.4	279.5	283.5	283.5
42.5°	264.8	265.6	268.4	272.4	271.6
45°	251.6	253.7	257.3	259.5	256.2
47.5°	239.0	240.5	245.5	243.0	237.6
50°	224.7	227.6	232.6	223.6	218.6
52.5°	210.0	213.2	218.6	206.1	203.2
55°	195.3	199.3	201.0	190.7	187.8
57.5°	179.5	183.8	180.3	174.2	171.3
60°	163.8	168.8	163.4	157.7	155.9
62.5°	147.3	153.0	146.9	141.9	139.4
65°	129.7	137.6	130.4	125.4	123.3
67.5°	112.5	120.8	113.2	108.9	107.5
70°	96.4	101.1	97.5	93.2	90.3
72.5°	77.0	81.7	81.0	76.3	74.5
75°	61.3	65.6	64.1	60.2	58.4
77.5°	45.5	50.2	48.7	44.1	43.4
80°	32.6	35.8	33.3	29.0	27.6
82.5°	20.4	22.9	19.7	16.5	15.8
85°	10.8	11.5	9.3	8.2	7.9
87.5°	3.6	3.9	3.9	3.6	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)