

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: P259104

Luminaire Tested: **14CZ-LD5-20-SQP-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259104
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-L82765-W2A1-U-4500K
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER
WITH SQP LENS
Light Source: (168) 80 CRI LEDS TUNED AT 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1381.0 lumens
Efficiency: N/A
Efficacy: 88.4 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

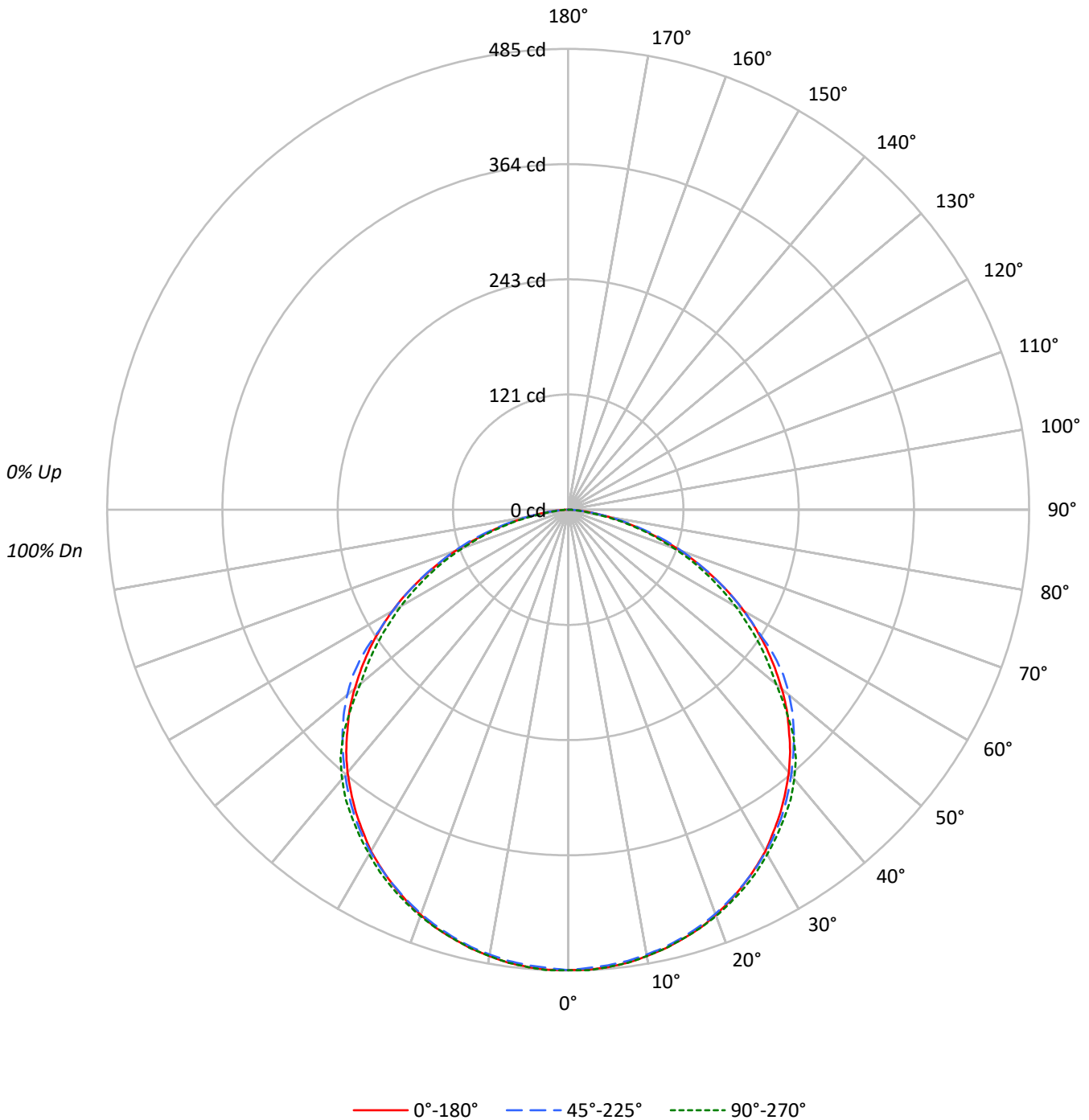
Input Watts (W): 15.624
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1304	1304	1304
5°	1305	1300	1305
10°	1304	1299	1304
15°	1302	1298	1302
20°	1299	1297	1303
25°	1295	1293	1303
30°	1289	1292	1301
35°	1279	1289	1302
40°	1268	1282	1300
45°	1250	1278	1273
50°	1228	1271	1194
55°	1196	1231	1150
60°	1151	1148	1095
65°	1078	1084	1025
70°	990	1001	928
75°	832	870	792
80°	660	674	558
85°	432	377	318



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.9	3.3
10°-20°	131.9	9.6
20°-30°	201.4	14.6
30°-40°	245.8	17.8
40°-50°	257.0	18.6
50°-60°	227.5	16.5
60°-70°	167.5	12.1
70°-80°	86.7	6.3
80°-90°	17.3	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°	379.2	27.5
0°-40°	625.0	45.3
0°-60°	1109.5	80.3
0°-90°	1381.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1381.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	485	485	485	485	485	
5°	483	483	481	483	483	46
15°	467	467	466	468	467	132
25°	436	436	436	438	439	201
35°	389	390	392	396	396	243
45°	328	331	336	339	334	254
55°	255	260	262	249	245	227
65°	169	180	170	164	161	168
75°	80	86	84	79	76	85
85°	14	15	12	11	10	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	484.6	484.6	484.6	484.6	484.6
2.5°	484.6	484.6	482.7	484.6	485.1
5°	483.2	483.2	481.3	483.2	483.2
7.5°	480.9	480.4	479.0	480.9	480.9
10°	477.1	477.1	475.3	477.6	477.1
12.5°	472.9	472.5	471.5	473.4	472.9
15°	467.3	467.3	465.9	467.8	467.3
17.5°	461.7	461.2	459.8	461.7	461.7
20°	453.7	453.3	452.8	454.7	455.1
22.5°	445.3	444.9	444.4	447.2	447.2
25°	436.0	436.0	435.5	438.3	438.8
27.5°	425.7	425.7	426.1	429.9	429.4
30°	414.9	414.9	415.9	418.7	418.7
32.5°	401.8	402.8	404.6	407.9	407.9
35°	389.2	390.1	392.5	396.2	396.2
37.5°	375.2	376.6	378.9	383.6	384.5
40°	361.1	362.1	364.9	370.0	370.0
42.5°	345.7	346.6	350.4	355.5	354.6
45°	328.4	331.2	335.9	338.7	334.5
47.5°	312.0	313.9	320.4	317.2	310.1
50°	293.3	297.0	303.6	291.9	285.3
52.5°	274.1	278.3	285.3	269.0	265.2
55°	254.9	260.1	262.4	248.9	245.1
57.5°	234.4	240.0	235.3	227.3	223.6
60°	213.8	220.3	213.3	205.8	203.5
62.5°	192.3	199.7	191.8	185.2	182.0
65°	169.3	179.6	170.3	163.7	160.9
67.5°	146.9	157.6	147.8	142.2	140.3
70°	125.8	131.9	127.2	121.6	117.9
72.5°	100.6	106.7	105.7	99.6	97.3
75°	80.0	85.6	83.7	78.6	76.2
77.5°	59.4	65.5	63.6	57.5	56.6
80°	42.6	46.8	43.5	37.9	36.0
82.5°	26.7	29.9	25.7	21.5	20.6
85°	14.0	15.0	12.2	10.8	10.3
87.5°	4.7	5.1	5.1	4.7	4.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)