

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: P230884

Luminaire Tested: **14CZ-LD5-20-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230884
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35573)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ-LD5-20-UNV-L930-CD1-U
Description: CRUZE 1x4 LED TROFFER
WITH RIBBED LENS
Light Source: (84) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1680.0 lumens
Efficiency: N/A
Efficacy: 103.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

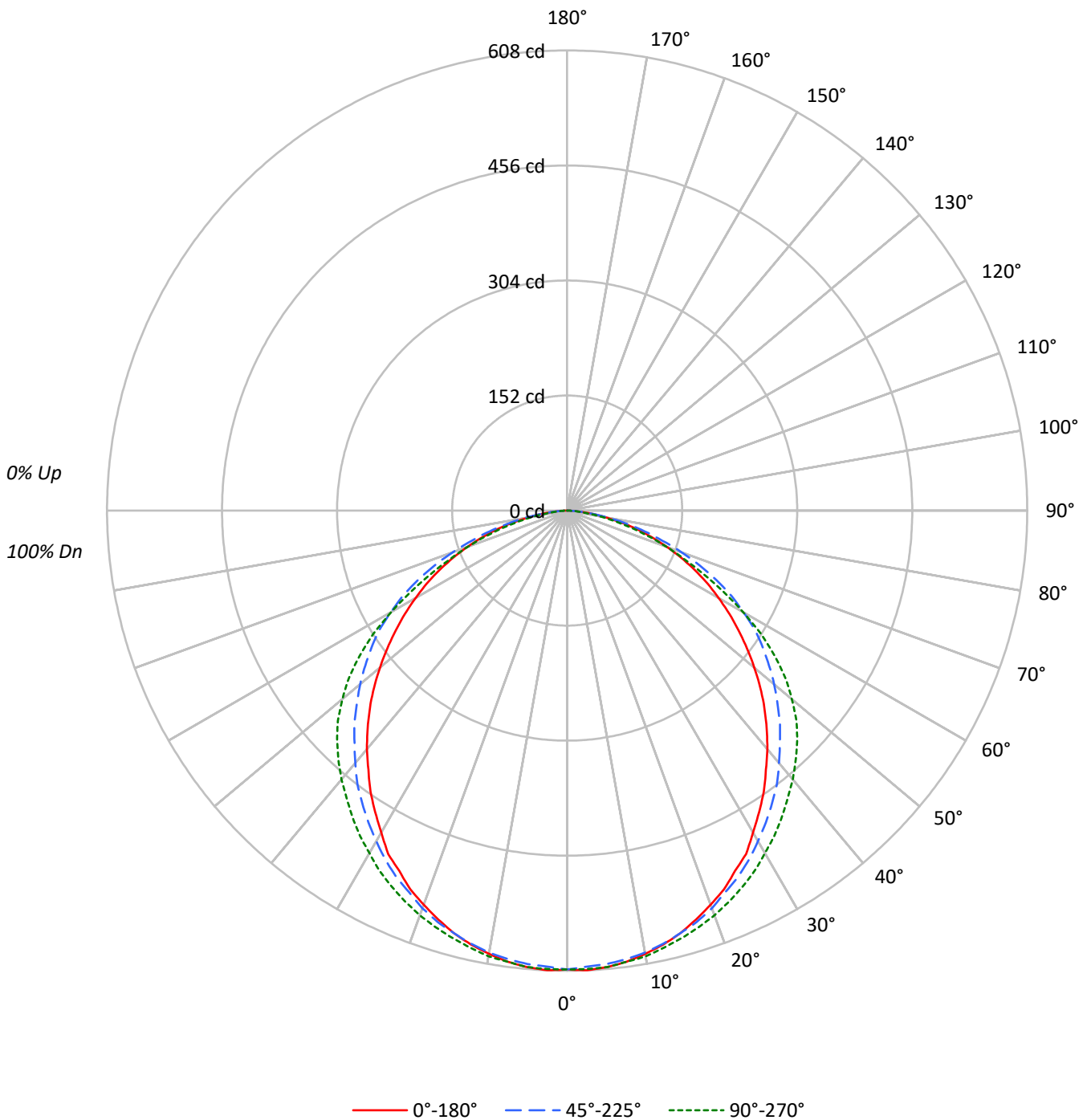
Input Watts (W): 16.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	66	88	78	71	65	75	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	36	34
8	61	47	39	33	59	46	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	29	42	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1632	1632	1632
5°	1635	1624	1635
10°	1625	1620	1634
15°	1611	1611	1629
20°	1587	1601	1629
25°	1559	1586	1628
30°	1526	1567	1624
35°	1488	1551	1624
40°	1446	1530	1629
45°	1403	1513	1636
50°	1352	1495	1623
55°	1298	1481	1570
60°	1244	1449	1444
65°	1187	1387	1266
70°	1102	1264	1094
75°	999	1102	905
80°	797	872	668
85°	562	485	383



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.4	3.4
10°-20°	163.9	9.8
20°-30°	247.1	14.7
30°-40°	296.2	17.6
40°-50°	307.4	18.3
50°-60°	277.2	16.5
60°-70°	202.2	12.0
70°-80°	106.1	6.3
80°-90°	22.6	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°	468.3	27.9
0°-40°	764.5	45.5
0°-60°	1349.1	80.3
0°-90°	1680.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1680.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	606	606	606	606	606	
5°	605	604	601	605	605	57
15°	578	578	578	585	585	163
25°	525	528	534	546	548	242
35°	453	458	472	490	494	283
45°	369	376	398	422	430	284
55°	277	287	316	336	335	248
65°	186	197	218	210	199	184
75°	96	109	106	92	87	101
85°	18	22	16	13	12	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	606.3	606.3	606.3	606.3	606.3
2.5°	607.9	606.3	603.0	606.3	606.3
5°	605.4	603.8	601.3	605.4	605.4
7.5°	601.3	599.6	598.0	602.1	601.3
10°	594.7	593.8	593.0	598.0	598.0
12.5°	587.2	587.2	586.4	592.2	591.4
15°	578.1	578.1	578.1	584.7	584.7
17.5°	566.5	568.2	569.8	577.3	577.3
20°	554.1	555.7	559.1	568.2	569.0
22.5°	541.7	542.5	545.8	556.6	559.1
25°	525.1	527.6	534.2	545.8	548.3
27.5°	511.8	512.7	520.1	533.4	536.7
30°	491.1	496.9	504.4	519.3	522.6
32.5°	472.1	477.1	488.7	504.4	509.4
35°	453.0	458.0	472.1	489.5	494.5
37.5°	431.5	439.0	455.5	472.9	478.7
40°	411.6	418.3	435.6	457.2	463.8
42.5°	390.1	396.7	415.8	439.8	447.2
45°	368.6	376.0	397.6	421.6	429.9
47.5°	346.2	354.5	376.8	403.3	410.8
50°	323.0	332.1	357.0	384.3	387.6
52.5°	299.8	309.8	336.3	360.3	363.6
55°	276.6	286.6	315.6	336.3	334.6
57.5°	254.3	265.0	294.8	305.6	304.0
60°	231.1	242.7	269.2	274.1	268.3
62.5°	209.5	220.3	245.2	241.0	233.6
65°	186.4	197.1	217.8	209.5	198.8
67.5°	163.2	176.4	189.7	175.6	167.3
70°	140.0	154.9	160.7	146.6	139.1
72.5°	117.6	133.3	131.7	117.6	112.6
75°	96.1	109.3	106.0	91.9	87.0
77.5°	72.9	87.8	80.3	68.7	64.6
80°	51.4	64.6	56.3	46.4	43.1
82.5°	34.0	43.1	34.8	27.3	24.8
85°	18.2	22.4	15.7	13.3	12.4
87.5°	7.5	6.6	5.8	5.8	5.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)