

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: P230893

Luminaire Tested: **14CZ-LD5-29-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230893
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-LD5-29-UNV-L935-CD1-U
Description: CRUZE 1x4 LED TROFFER
WITH RIBBED LENS
Light Source: (84) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2512.0 lumens
Efficiency: N/A
Efficacy: 102.5 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

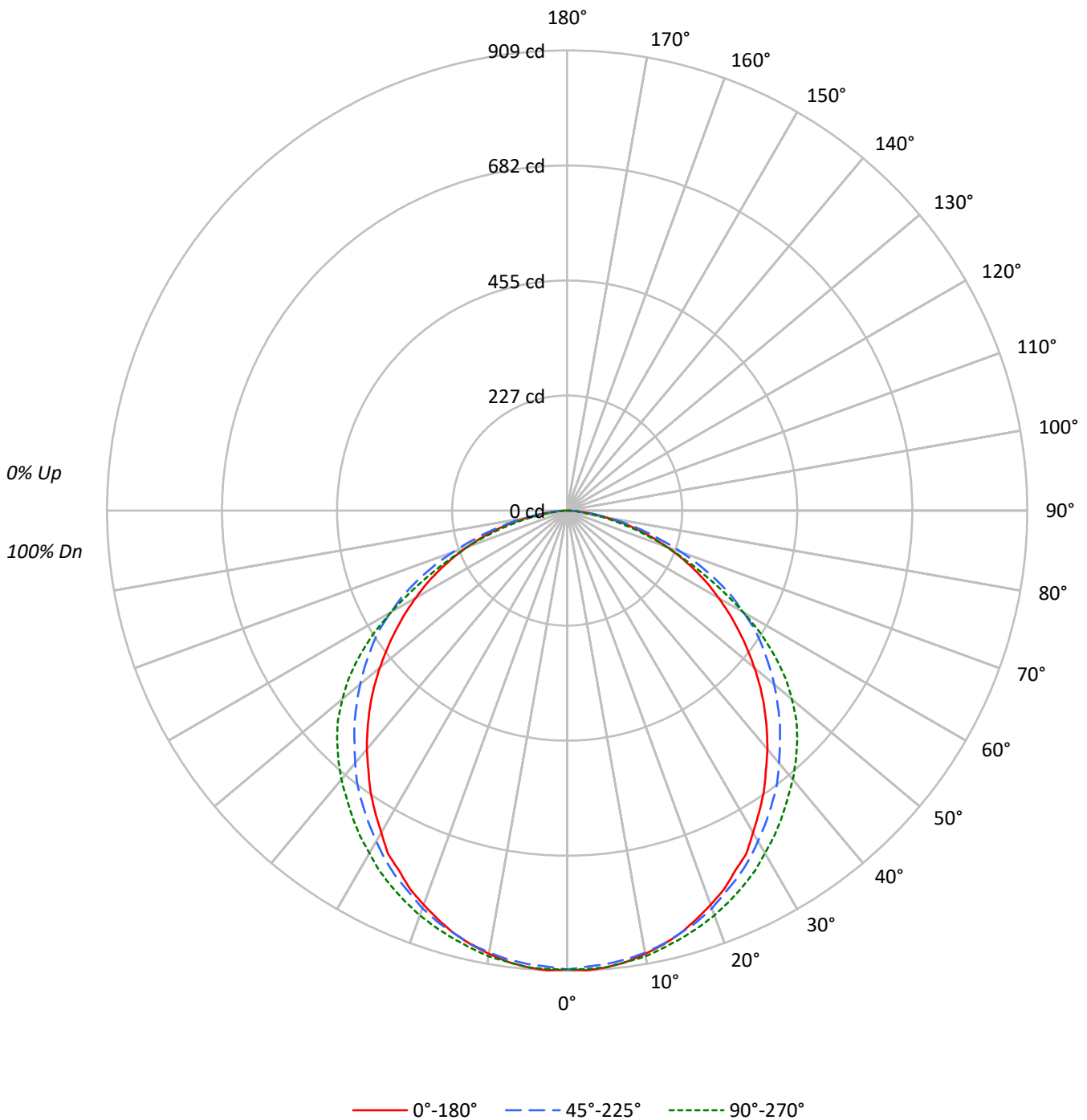
Input Watts (W): 24.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2439	2439	2439
5°	2445	2429	2445
10°	2430	2423	2443
15°	2408	2408	2436
20°	2373	2394	2436
25°	2331	2372	2434
30°	2282	2344	2428
35°	2225	2319	2429
40°	2162	2288	2436
45°	2097	2262	2446
50°	2022	2235	2426
55°	1940	2213	2347
60°	1859	2166	2159
65°	1774	2074	1892
70°	1647	1890	1637
75°	1494	1648	1352
80°	1190	1305	998
85°	840	726	574



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.8	3.4
10°-20°	245.0	9.8
20°-30°	369.4	14.7
30°-40°	442.8	17.6
40°-50°	459.6	18.3
50°-60°	414.5	16.5
60°-70°	302.4	12.0
70°-80°	158.7	6.3
80°-90°	33.8	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°	700.2	27.9
0°-40°	1143.1	45.5
0°-60°	2017.2	80.3
0°-90°	2512.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2512.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	906	906	906	906	906	
5°	905	903	899	905	905	86
15°	864	864	864	874	874	243
25°	785	789	799	816	820	362
35°	677	685	706	732	739	423
45°	551	562	594	630	643	425
55°	414	428	472	503	500	370
65°	279	295	326	313	297	275
75°	144	164	158	138	130	151
85°	27	33	24	20	19	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	906.5	906.5	906.5	906.5	906.5
2.5°	909.0	906.5	901.6	906.5	906.5
5°	905.3	902.8	899.1	905.3	905.3
7.5°	899.1	896.6	894.1	900.3	899.1
10°	889.2	887.9	886.7	894.1	894.1
12.5°	878.0	878.0	876.8	885.5	884.2
15°	864.4	864.4	864.4	874.3	874.3
17.5°	847.1	849.5	852.0	863.2	863.2
20°	828.5	831.0	835.9	849.5	850.8
22.5°	809.9	811.2	816.1	832.2	835.9
25°	785.1	788.9	798.8	816.1	819.8
27.5°	765.3	766.6	777.7	797.5	802.5
30°	734.4	743.0	754.2	776.5	781.4
32.5°	705.9	713.3	730.7	754.2	761.6
35°	677.4	684.8	705.9	731.9	739.3
37.5°	645.2	656.4	681.1	707.1	715.8
40°	615.5	625.4	651.4	683.6	693.5
42.5°	583.3	593.2	621.7	657.6	668.7
45°	551.1	562.2	594.4	630.3	642.7
47.5°	517.7	530.0	563.5	603.1	614.2
50°	483.0	496.6	533.8	574.6	579.6
52.5°	448.3	463.2	502.8	538.7	543.7
55°	413.6	428.5	471.8	502.8	500.3
57.5°	380.2	396.3	440.9	457.0	454.5
60°	345.5	362.9	402.5	409.9	401.2
62.5°	313.3	329.4	366.6	360.4	349.2
65°	278.6	294.7	325.7	313.3	297.2
67.5°	244.0	263.8	283.6	262.5	250.2
70°	209.3	231.6	240.2	219.2	208.1
72.5°	175.9	199.4	196.9	175.9	168.4
75°	143.7	163.5	158.5	137.5	130.0
77.5°	109.0	131.3	120.1	102.8	96.6
80°	76.8	96.6	84.2	69.4	64.4
82.5°	50.8	64.4	52.0	40.9	37.2
85°	27.2	33.4	23.5	19.8	18.6
87.5°	11.1	9.9	8.7	8.7	7.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)