

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: P230918

Luminaire Tested: **14CZ-LD5-29-S-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230918
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35112)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ-LD5-29-S-UNV-L940-CD1-U
Description: CRUZE 1x4 LED TROFFER
WITH SMOOTH LENS
Light Source: (84) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2626.0 lumens
Efficiency: N/A
Efficacy: 107.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

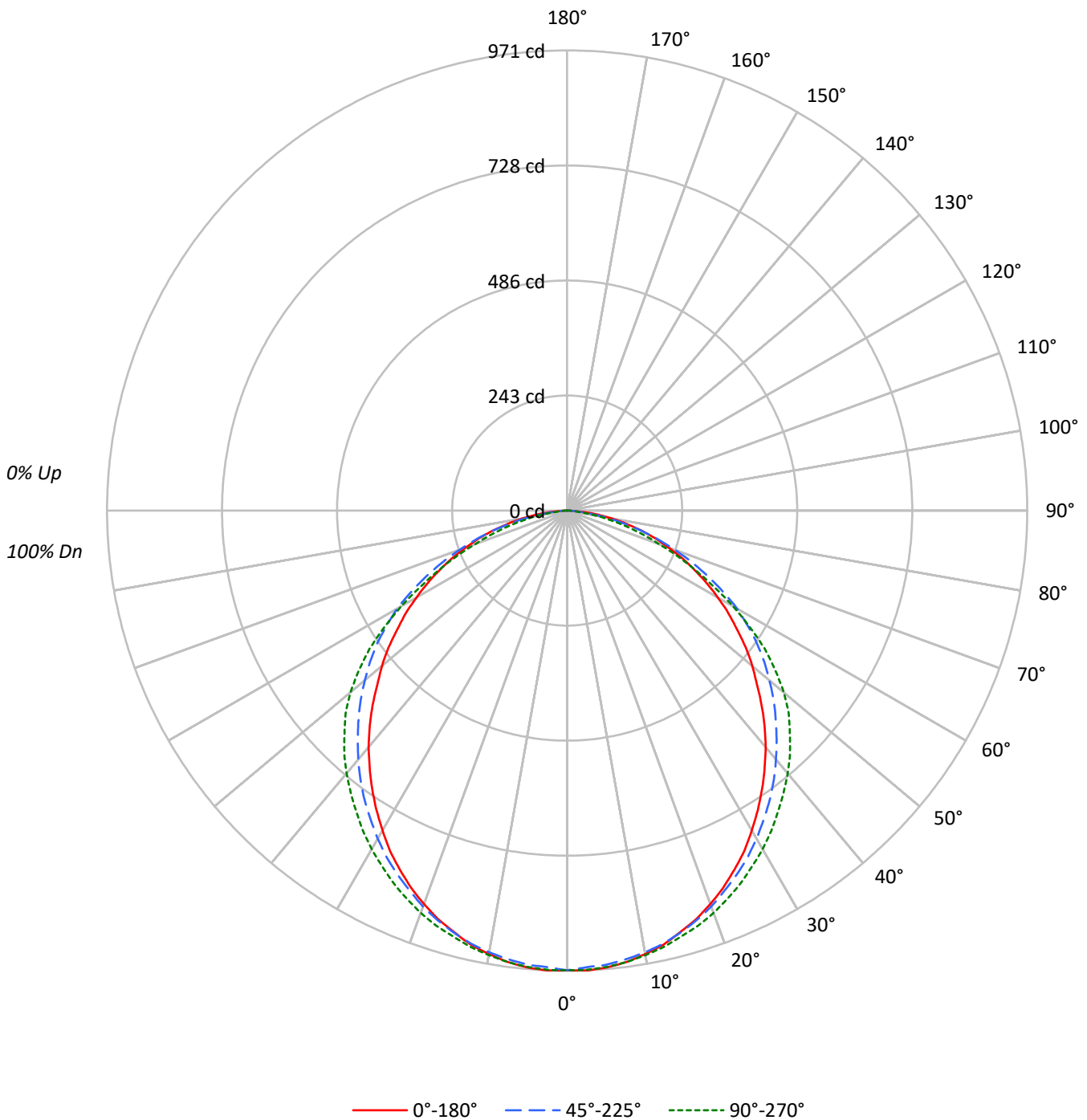
Input Watts (W): 24.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	100	97	106	102	98	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2610	2610	2610
5°	2614	2598	2611
10°	2596	2587	2603
15°	2566	2569	2592
20°	2530	2547	2587
25°	2481	2515	2575
30°	2421	2483	2563
35°	2356	2449	2549
40°	2290	2409	2544
45°	2209	2369	2529
50°	2136	2332	2498
55°	2053	2295	2388
60°	1977	2229	2179
65°	1892	2086	1915
70°	1786	1896	1620
75°	1667	1643	1338
80°	1469	1269	979
85°	1155	614	543



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.7	3.5
10°-20°	261.1	9.9
20°-30°	391.9	14.9
30°-40°	467.2	17.8
40°-50°	481.2	18.3
50°-60°	428.9	16.3
60°-70°	309.0	11.8
70°-80°	161.6	6.2
80°-90°	33.4	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°	744.7	28.4
0°-40°	1211.9	46.1
0°-60°	2122.0	80.8
0°-90°	2626.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2626.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	970	970	970	970	970	
5°	968	965	962	968	966	92
15°	921	922	922	931	930	260
25°	836	840	847	864	867	385
35°	717	727	745	770	776	449
45°	580	593	622	658	665	448
55°	438	452	489	511	509	392
65°	297	308	328	312	301	294
75°	160	168	158	137	129	170
85°	37	33	20	18	18	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	970.0	970.0	970.0	970.0	970.0
2.5°	971.2	968.9	964.2	970.0	970.0
5°	967.7	965.4	961.9	967.7	966.5
7.5°	960.7	958.3	954.8	961.9	960.7
10°	950.2	949.0	946.6	953.7	952.5
12.5°	938.5	937.3	936.1	943.1	943.1
15°	920.9	922.1	922.1	931.4	930.3
17.5°	904.5	905.7	906.9	918.6	918.6
20°	883.5	884.6	889.3	902.2	903.3
22.5°	861.2	862.4	868.2	883.5	885.8
25°	835.5	840.2	847.2	863.6	867.1
27.5°	809.7	813.2	824.9	843.7	846.0
30°	779.3	786.3	799.2	820.3	824.9
32.5°	748.9	757.1	772.3	795.7	801.5
35°	717.3	726.7	745.4	770.0	775.8
37.5°	684.5	692.7	716.1	741.9	750.1
40°	651.8	660.0	685.7	715.0	724.3
42.5°	616.7	628.4	654.1	686.9	696.2
45°	580.4	593.3	622.5	657.6	664.6
47.5°	542.9	557.0	590.9	626.0	634.2
50°	510.2	523.1	557.0	590.9	596.8
52.5°	475.1	486.8	524.2	552.3	553.5
55°	437.6	451.7	489.1	511.4	509.0
57.5°	403.7	415.4	451.7	463.4	456.4
60°	367.4	378.0	414.2	415.4	404.9
62.5°	332.3	342.9	370.9	362.7	349.9
65°	297.2	307.7	327.6	312.4	300.7
67.5°	263.3	272.6	284.3	264.5	252.8
70°	227.0	239.9	241.0	217.6	205.9
72.5°	195.4	202.4	200.1	177.9	167.3
75°	160.3	168.5	158.0	136.9	128.7
77.5°	127.5	133.4	119.4	99.5	93.6
80°	94.8	98.3	81.9	66.7	63.2
82.5°	64.4	64.4	46.8	36.3	32.8
85°	37.4	32.8	19.9	17.6	17.6
87.5°	12.9	8.2	8.2	8.2	8.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)