

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: P230916

Luminaire Tested: **14CZ-LD5-29-S-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230916
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-L930-CD1-U
Description: CRUZE 1x4 LED TROFFER
WITH SMOOTH LENS
Light Source: (84) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2466.0 lumens
Efficiency: N/A
Efficacy: 100.7 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

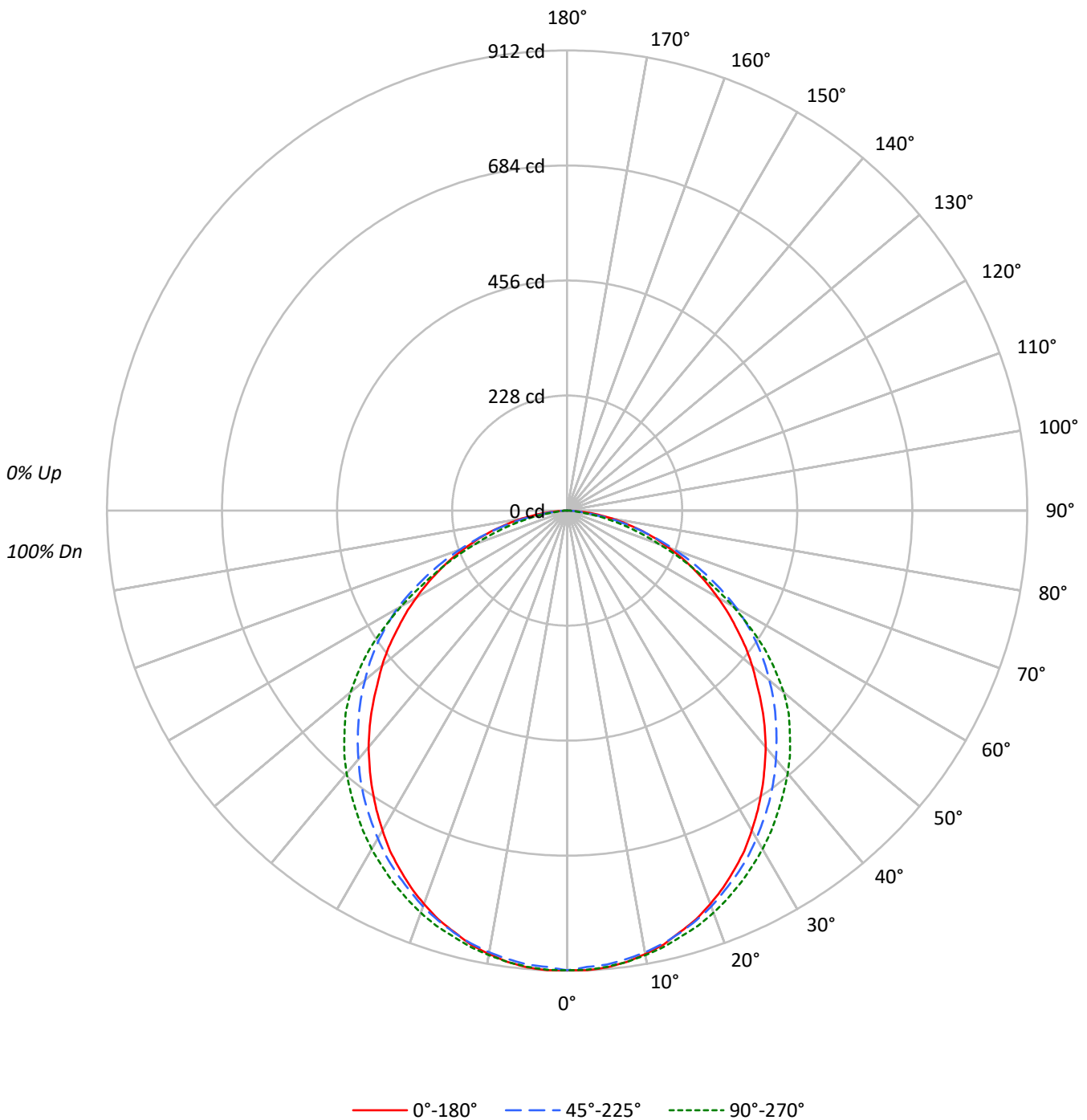
Input Watts (W): 24.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2451	2451	2451
5°	2455	2440	2452
10°	2438	2429	2444
15°	2409	2412	2434
20°	2376	2391	2429
25°	2330	2362	2417
30°	2274	2332	2407
35°	2213	2300	2393
40°	2150	2262	2389
45°	2074	2225	2375
50°	2006	2189	2346
55°	1928	2155	2243
60°	1857	2094	2046
65°	1777	1959	1798
70°	1677	1781	1522
75°	1565	1542	1257
80°	1379	1192	919
85°	1087	577	509



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.1	3.5
10°-20°	245.2	9.9
20°-30°	368.0	14.9
30°-40°	438.7	17.8
40°-50°	451.9	18.3
50°-60°	402.7	16.3
60°-70°	290.2	11.8
70°-80°	151.8	6.2
80°-90°	31.4	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°	699.3	28.4
0°-40°	1138.0	46.1
0°-60°	1992.7	80.8
0°-90°	2466.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2466.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	911	911	911	911	911	
5°	909	906	903	909	908	86
15°	865	866	866	875	874	244
25°	785	789	796	811	814	361
35°	674	682	700	723	728	421
45°	545	557	585	618	624	421
55°	411	424	459	480	478	369
65°	279	289	308	293	282	276
75°	150	158	148	129	121	159
85°	35	31	19	16	16	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	910.9	910.9	910.9	910.9	910.9
2.5°	912.0	909.8	905.4	910.9	910.9
5°	908.7	906.5	903.2	908.7	907.6
7.5°	902.2	900.0	896.7	903.2	902.2
10°	892.3	891.2	889.0	895.6	894.5
12.5°	881.3	880.2	879.1	885.7	885.7
15°	864.8	865.9	865.9	874.7	873.6
17.5°	849.4	850.5	851.6	862.6	862.6
20°	829.6	830.7	835.1	847.2	848.3
22.5°	808.7	809.8	815.3	829.6	831.8
25°	784.6	789.0	795.6	810.9	814.2
27.5°	760.4	763.7	774.7	792.3	794.5
30°	731.8	738.4	750.5	770.3	774.7
32.5°	703.3	711.0	725.2	747.2	752.7
35°	673.6	682.4	700.0	723.0	728.5
37.5°	642.8	650.5	672.5	696.7	704.4
40°	612.1	619.7	643.9	671.4	680.2
42.5°	579.1	590.1	614.3	645.0	653.8
45°	545.0	557.1	584.6	617.6	624.1
47.5°	509.9	523.0	554.9	587.9	595.6
50°	479.1	491.2	523.0	554.9	560.4
52.5°	446.1	457.1	492.3	518.7	519.8
55°	411.0	424.2	459.3	480.2	478.0
57.5°	379.1	390.1	424.2	435.1	428.5
60°	345.0	354.9	389.0	390.1	380.2
62.5°	312.1	322.0	348.3	340.6	328.6
65°	279.1	289.0	307.7	293.4	282.4
67.5°	247.2	256.0	267.0	248.3	237.4
70°	213.2	225.3	226.4	204.4	193.4
72.5°	183.5	190.1	187.9	167.0	157.1
75°	150.5	158.2	148.3	128.6	120.9
77.5°	119.8	125.3	112.1	93.4	87.9
80°	89.0	92.3	76.9	62.6	59.3
82.5°	60.4	60.4	44.0	34.1	30.8
85°	35.2	30.8	18.7	16.5	16.5
87.5°	12.1	7.7	7.7	7.7	7.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)