

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: P230584

Luminaire Tested: **22CZ-LD5-29-S-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230584
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25712)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-29-S-UNV-L930-CD1-U
Description: CRUZE 2x2 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: 2449.0 lumens
Efficiency: N/A
Efficacy: 104.2 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

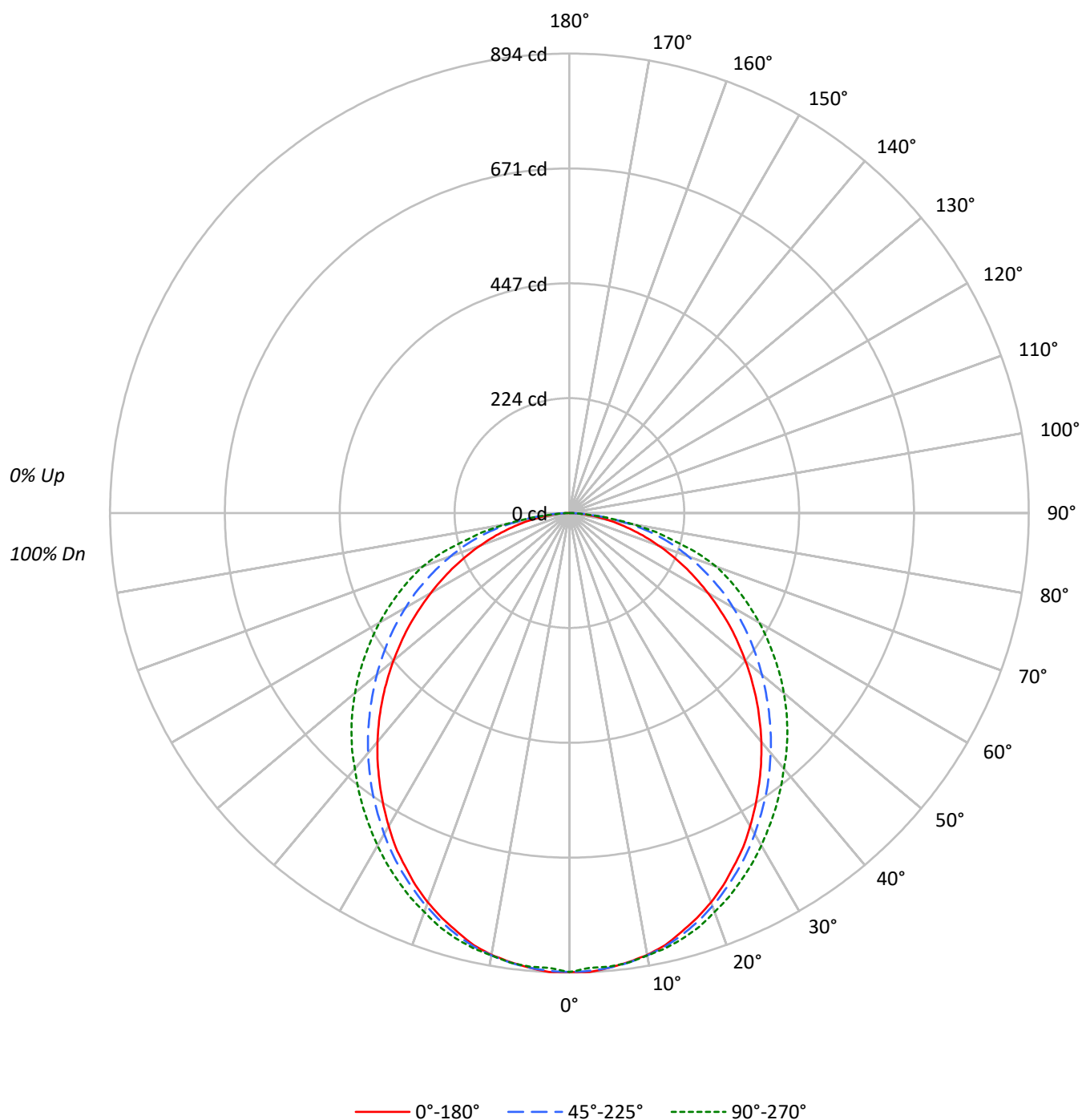
Input Watts (W): 23.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	109	104	99	95	106	101	97	94		97	94	91		93	91	88		90	87	85
2	99	90	83	77	96	88	82	77		85	79	75		81	77	73		78	75	71
3	90	79	71	64	87	78	70	64		75	68	63		72	66	62		69	64	60
4	82	70	61	54	80	69	61	54		66	59	53		64	58	53		62	56	52
5	76	63	54	47	74	62	53	47		59	52	46		57	51	46		56	50	45
6	70	56	47	41	68	56	47	41		54	46	40		52	45	40		50	44	40
7	65	51	42	36	63	50	42	36		49	41	36		47	41	36		46	40	35
8	60	47	38	32	59	46	38	32		45	37	32		43	37	32		42	36	32
9	56	43	35	29	55	42	34	29		41	34	29		40	34	29		39	33	29
10	53	40	32	26	52	39	32	26		38	31	26		37	31	26		36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2403	2403	2403
5°	2399	2399	2393
10°	2385	2388	2388
15°	2350	2366	2386
20°	2308	2331	2365
25°	2249	2288	2344
30°	2186	2241	2321
35°	2114	2191	2299
40°	2041	2140	2281
45°	1961	2090	2283
50°	1871	2048	2280
55°	1782	2014	2279
60°	1678	1982	2298
65°	1573	1955	2329
70°	1453	1934	2388
75°	1309	1920	2214
80°	1148	1787	1932
85°	945	1343	1198



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.3	3.4
10°-20°	239.5	9.8
20°-30°	355.7	14.5
30°-40°	418.7	17.1
40°-50°	426.9	17.4
50°-60°	385.0	15.7
60°-70°	303.3	12.4
70°-80°	187.1	7.6
80°-90°	48.6	2.0
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°	679.5	27.7
0°-40°	1098.2	44.8
0°-60°	1910.1	78.0
0°-90°	2449.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2449.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	893	893	893	893	893	
5°	888	889	888	887	886	84
15°	843	847	849	854	856	238
25°	758	762	770	783	789	349
35°	643	650	667	688	700	403
45°	515	523	549	582	600	397
55°	380	393	429	468	486	339
65°	247	265	307	346	366	245
75°	126	147	185	206	213	134
85°	31	39	44	41	39	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	892.8	892.8	892.8	892.8	892.8
2.5°	894.0	894.0	891.6	889.3	885.7
5°	888.1	889.3	888.1	886.9	885.7
7.5°	881.0	882.2	882.2	882.2	882.2
10°	872.8	874.0	874.0	874.0	874.0
12.5°	861.0	862.2	863.4	864.6	866.9
15°	843.4	846.9	849.3	854.0	856.3
17.5°	825.8	829.3	832.8	838.7	843.4
20°	805.8	808.1	814.0	821.1	825.8
22.5°	783.4	786.9	792.8	802.2	809.3
25°	757.5	762.2	770.5	783.4	789.3
27.5°	732.8	736.4	746.9	761.1	769.3
30°	703.4	708.1	721.1	738.7	746.9
32.5°	674.0	679.9	694.0	714.0	723.4
35°	643.4	650.5	667.0	688.1	699.9
37.5°	612.8	619.9	638.7	662.3	675.2
40°	581.1	588.1	609.3	635.2	649.3
42.5°	548.2	556.4	579.9	609.3	625.8
45°	515.2	523.4	549.3	582.3	599.9
47.5°	481.1	490.5	518.7	555.2	572.9
50°	447.0	457.6	489.3	527.0	544.6
52.5°	412.9	424.6	458.8	497.6	516.4
55°	379.9	392.9	429.3	468.2	485.8
57.5°	344.7	359.9	398.8	436.4	456.4
60°	311.7	328.2	368.2	405.8	427.0
62.5°	278.8	296.4	338.8	376.4	396.4
65°	247.0	264.7	307.0	345.8	365.8
67.5°	215.3	235.3	276.4	315.2	335.2
70°	184.7	205.9	245.8	283.5	303.5
72.5°	155.3	176.4	216.4	251.7	263.5
75°	125.9	147.0	184.7	205.9	212.9
77.5°	98.8	118.8	151.7	164.7	174.1
80°	74.1	91.8	115.3	123.5	124.7
82.5°	50.6	65.9	80.0	81.2	80.0
85°	30.6	38.8	43.5	41.2	38.8
87.5°	14.1	15.3	14.1	9.4	5.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)