

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: P230542

Luminaire Tested: **22CZ-LD5-29-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230542
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25706)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-29-UNV-L940-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH RIBBED LENS
Light Source: (84) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2558.0 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

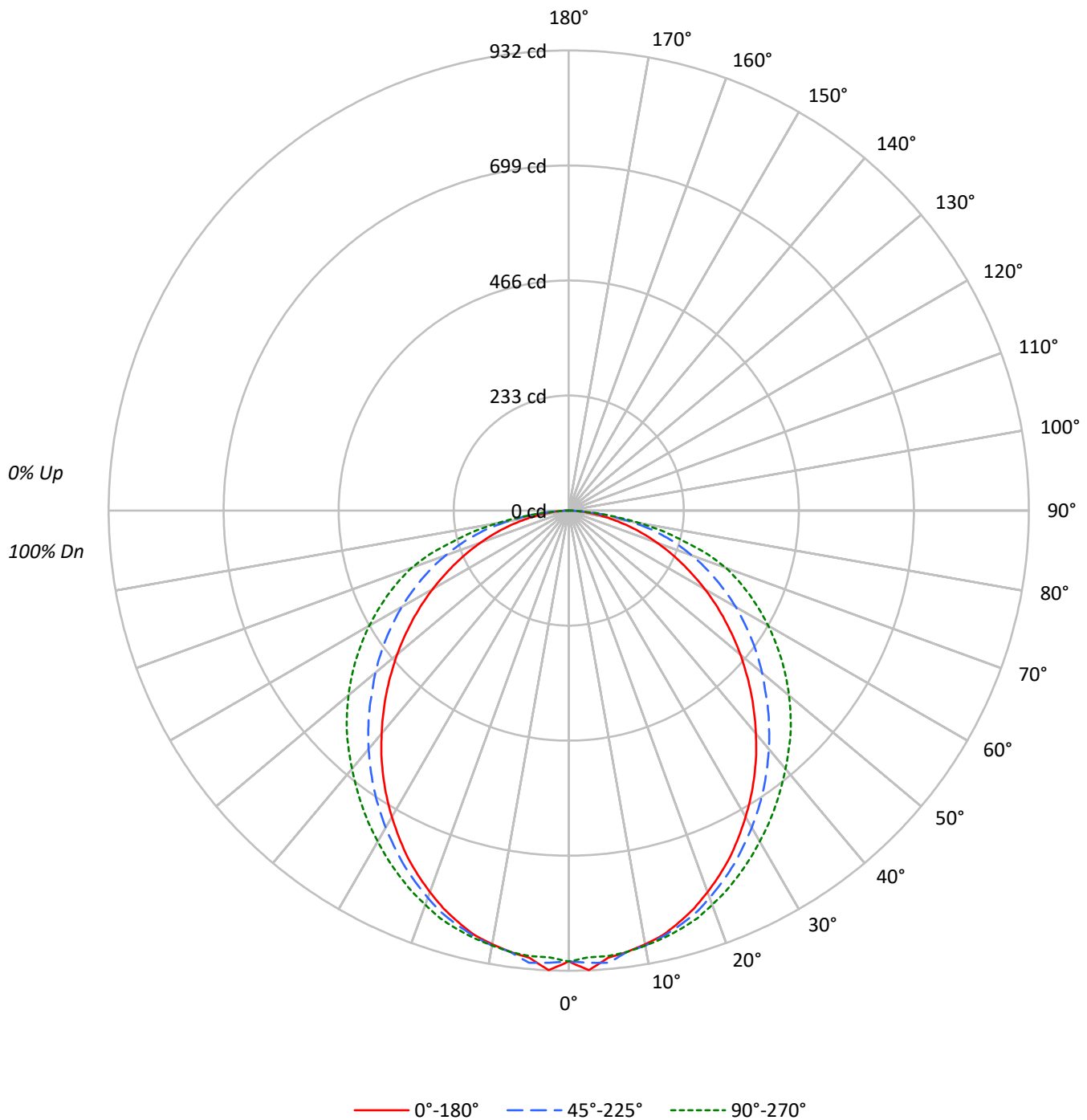
Input Watts (W): 23.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0		
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83		
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69		
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58		
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49		
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43		
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37		
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33		
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29		
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26		
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2457	2457	2457
5°	2456	2483	2446
10°	2437	2444	2444
15°	2405	2422	2443
20°	2355	2390	2433
25°	2297	2349	2419
30°	2226	2304	2404
35°	2153	2260	2399
40°	2071	2216	2399
45°	1988	2173	2419
50°	1901	2141	2437
55°	1809	2118	2469
60°	1714	2102	2511
65°	1608	2091	2574
70°	1497	2085	2662
75°	1358	2083	2522
80°	1176	1928	2236
85°	997	1460	1420



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.6	3.4
10°-20°	245.3	9.6
20°-30°	364.9	14.3
30°-40°	431.6	16.9
40°-50°	443.6	17.3
50°-60°	405.3	15.8
60°-70°	324.3	12.7
70°-80°	203.5	8.0
80°-90°	53.0	2.1
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°	696.8	27.2
0°-40°	1128.4	44.1
0°-60°	1977.3	77.3
0°-90°	2558.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2558.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	913	913	913	913	913	
5°	909	909	919	913	906	86
15°	863	864	870	874	877	243
25°	774	779	791	805	815	356
35°	656	664	688	714	730	410
45°	522	536	571	613	636	403
55°	386	404	452	501	526	345
65°	252	275	328	378	404	251
75°	131	156	200	230	243	139
85°	32	41	47	46	46	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	913.0	913.0	913.0	913.0	913.0
2.5°	931.7	928.0	916.8	909.3	905.6
5°	909.3	909.3	919.3	913.0	905.6
7.5°	901.8	901.8	901.8	920.5	901.8
10°	891.9	893.1	894.4	901.8	894.4
12.5°	880.7	880.7	883.2	885.7	886.9
15°	863.3	864.5	869.5	874.5	877.0
17.5°	844.6	848.4	854.6	860.8	865.8
20°	822.2	827.2	834.7	844.6	849.6
22.5°	798.6	803.6	813.5	824.7	833.4
25°	773.7	778.7	791.1	804.8	814.8
27.5°	745.1	751.3	766.3	784.9	794.9
30°	716.5	724.0	741.4	762.5	773.7
32.5°	686.6	695.4	715.3	738.9	752.6
35°	655.5	664.3	687.9	714.0	730.2
37.5°	623.2	633.2	659.3	689.1	706.5
40°	589.6	600.8	630.7	663.0	682.9
42.5°	556.0	568.5	600.8	639.4	659.3
45°	522.4	536.1	571.0	613.3	635.6
47.5°	487.6	503.8	539.9	587.1	609.5
50°	454.0	470.2	511.3	559.8	582.2
52.5°	419.2	437.9	481.4	531.2	554.8
55°	385.6	404.3	451.5	501.3	526.2
57.5°	352.0	370.7	420.4	471.4	496.3
60°	318.4	338.3	390.6	440.3	466.5
62.5°	284.9	306.0	359.5	410.5	435.4
65°	252.5	274.9	328.4	378.2	404.3
67.5°	221.4	245.1	297.3	345.8	371.9
70°	190.3	214.0	265.0	312.2	338.3
72.5°	160.5	184.1	233.9	276.1	296.1
75°	130.6	155.5	200.3	230.1	242.6
77.5°	102.0	126.9	165.4	185.3	199.0
80°	75.9	97.0	124.4	139.3	144.3
82.5°	52.2	69.7	87.1	90.8	93.3
85°	32.3	41.0	47.3	46.0	46.0
87.5°	14.9	16.2	13.7	10.0	6.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)