

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: P230541

Luminaire Tested: **22CZ-LD5-29-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230541
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-L935-CD1-U
Description: CRUZE 2x2 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: 2496.0 lumens
Efficiency: N/A
Efficacy: 106.2 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

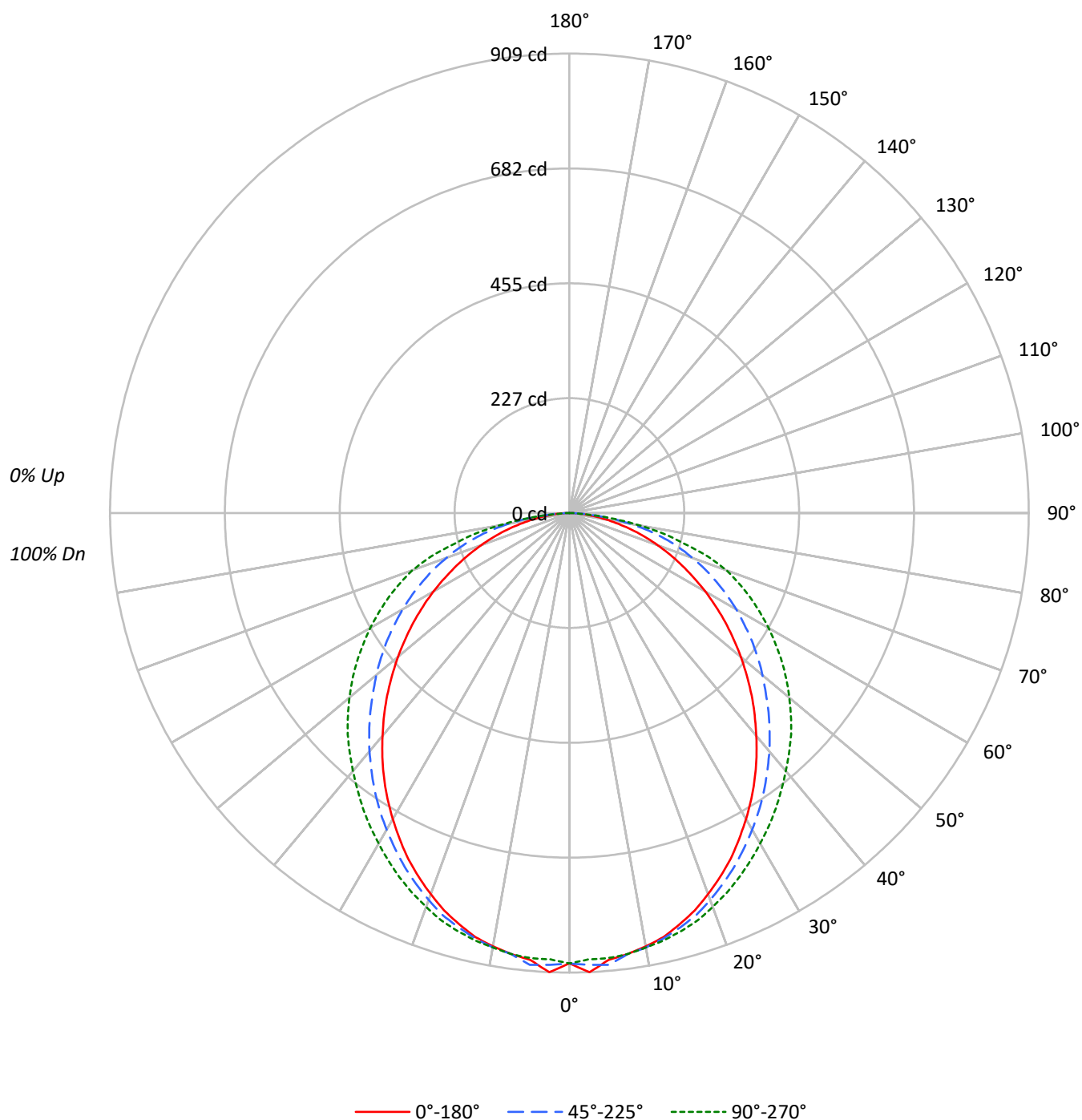
Input Watts (W): 23.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2397	2397	2397
5°	2397	2423	2387
10°	2378	2385	2385
15°	2347	2364	2384
20°	2298	2332	2374
25°	2242	2292	2360
30°	2172	2248	2346
35°	2101	2205	2341
40°	2021	2162	2341
45°	1940	2120	2360
50°	1855	2089	2378
55°	1765	2067	2409
60°	1672	2051	2450
65°	1569	2040	2512
70°	1461	2034	2597
75°	1325	2032	2461
80°	1147	1881	2182
85°	976	1423	1386



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.5	3.4
10°-20°	239.3	9.6
20°-30°	356.1	14.3
30°-40°	421.1	16.9
40°-50°	432.8	17.3
50°-60°	395.5	15.8
60°-70°	316.4	12.7
70°-80°	198.6	8.0
80°-90°	51.7	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°	679.9	27.2
0°-40°	1101.0	44.1
0°-60°	1929.3	77.3
0°-90°	2496.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2496.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	891	891	891	891	891	
5°	887	887	897	891	884	84
15°	842	844	848	853	856	237
25°	755	760	772	785	795	347
35°	640	648	671	697	712	400
45°	510	523	557	598	620	393
55°	376	394	441	489	513	337
65°	246	268	320	369	394	245
75°	127	152	195	224	237	135
85°	32	40	46	45	45	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	890.9	890.9	890.9	890.9	890.9
2.5°	909.1	905.5	894.5	887.3	883.6
5°	887.3	887.3	897.0	890.9	883.6
7.5°	880.0	880.0	880.0	898.2	880.0
10°	870.3	871.5	872.7	880.0	872.7
12.5°	859.3	859.3	861.8	864.2	865.4
15°	842.4	843.6	848.4	853.3	855.7
17.5°	824.1	827.8	833.9	839.9	844.8
20°	802.3	807.2	814.4	824.1	829.0
22.5°	779.2	784.1	793.8	804.7	813.2
25°	755.0	759.8	772.0	785.3	795.0
27.5°	727.0	733.1	747.7	765.9	775.6
30°	699.1	706.4	723.4	744.0	755.0
32.5°	670.0	678.5	697.9	721.0	734.3
35°	639.7	648.2	671.2	696.7	712.5
37.5°	608.1	617.8	643.3	672.4	689.4
40°	575.3	586.3	615.4	646.9	666.4
42.5°	542.6	554.7	586.3	623.9	643.3
45°	509.8	523.1	557.1	598.4	620.2
47.5°	475.8	491.6	526.8	572.9	594.7
50°	443.0	458.8	498.9	546.2	568.0
52.5°	409.0	427.2	469.7	518.3	541.3
55°	376.3	394.5	440.6	489.1	513.4
57.5°	343.5	361.7	410.3	460.0	484.3
60°	310.7	330.1	381.1	429.7	455.2
62.5°	278.0	298.6	350.8	400.5	424.8
65°	246.4	268.2	320.4	369.0	394.5
67.5°	216.1	239.1	290.1	337.4	362.9
70°	185.7	208.8	258.5	304.7	330.1
72.5°	156.6	179.6	228.2	269.5	288.9
75°	127.4	151.7	195.4	224.5	236.7
77.5°	99.5	123.8	161.4	180.9	194.2
80°	74.0	94.7	121.4	135.9	140.8
82.5°	51.0	68.0	85.0	88.6	91.0
85°	31.6	40.1	46.1	44.9	44.9
87.5°	14.6	15.8	13.4	9.7	6.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)