

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: P230797

Luminaire Tested: **22CZ-LD5-20-SQP-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230797
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25713)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-20-SQP-UNV-L935-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SQP LENS
Light Source: (84) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1241.0 lumens
Efficiency: N/A
Efficacy: 75.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.31 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

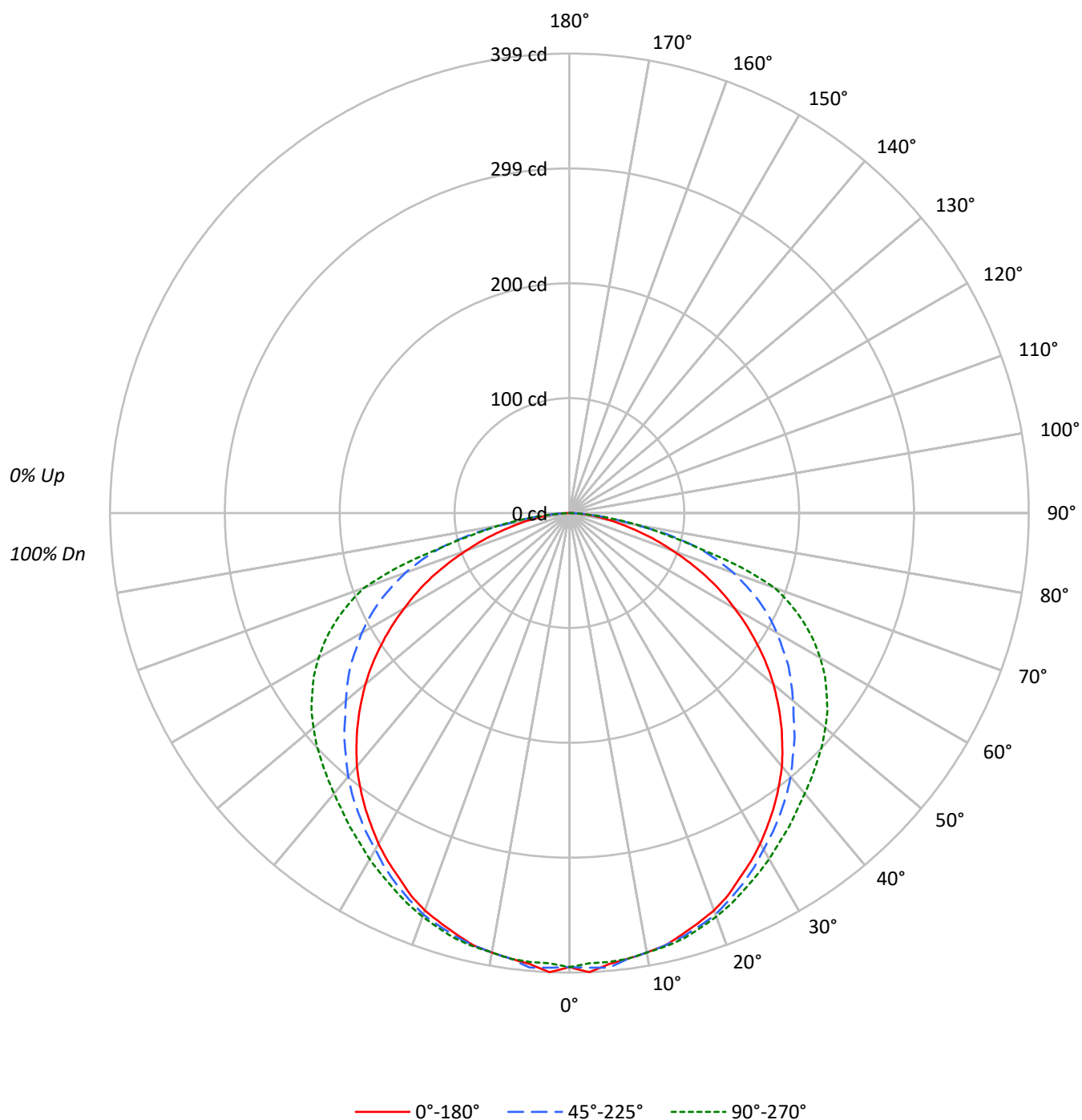
Input Watts (W): 16.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	99	95	105	101	97	93		97	93	90		93	90	87		89	87	85
2	98	89	82	76	95	87	81	75		84	78	73		80	76	71		77	73	70
3	89	78	69	62	86	76	68	62		73	66	61		70	64	59		68	63	58
4	81	68	59	52	79	67	58	52		64	57	51		62	56	50		60	54	50
5	74	61	52	45	72	60	51	44		58	50	44		56	49	43		54	48	43
6	68	55	45	39	66	54	45	39		52	44	38		50	43	38		48	42	37
7	63	49	40	34	62	49	40	34		47	39	34		45	39	33		44	38	33
8	59	45	36	30	57	44	36	30		43	35	30		42	35	30		40	34	29
9	55	41	33	27	54	41	33	27		39	32	27		38	32	27		37	31	27
10	51	38	30	24	50	37	30	24		36	29	24		35	29	24		35	28	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1061	1061	1061
5°	1062	1070	1057
10°	1059	1059	1059
15°	1055	1061	1066
20°	1052	1062	1068
25°	1039	1056	1070
30°	1030	1048	1078
35°	1019	1048	1092
40°	1009	1050	1117
45°	990	1053	1159
50°	968	1061	1214
55°	936	1090	1279
60°	892	1121	1354
65°	840	1160	1430
70°	751	1190	1494
75°	651	1193	1182
80°	553	882	956
85°	475	596	534



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.4	3.0
10°-20°	107.5	8.7
20°-30°	163.8	13.2
30°-40°	200.4	16.1
40°-50°	215.6	17.4
50°-60°	208.9	16.8
60°-70°	176.9	14.3
70°-80°	106.9	8.6
80°-90°	23.5	1.9
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°	308.7	24.9
0°-40°	509.1	41.0
0°-60°	933.6	75.2
0°-90°	1241.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1241.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	394	394	394	394	394	
5°	393	393	396	394	391	37
15°	379	380	381	382	383	107
25°	350	352	356	358	360	161
35°	310	312	319	328	332	194
45°	260	265	277	294	304	201
55°	200	208	232	259	273	178
65°	132	146	182	211	225	130
75°	63	85	115	117	114	67
85°	15	18	19	18	17	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	394.2	394.2	394.2	394.2	394.2
2.5°	399.0	398.0	395.1	393.2	391.3
5°	393.2	393.2	396.1	394.2	391.3
7.5°	390.3	390.3	390.3	395.1	390.3
10°	387.4	388.4	387.4	391.3	387.4
12.5°	384.5	384.5	384.5	385.5	385.5
15°	378.8	379.7	380.7	381.6	382.6
17.5°	373.0	373.9	375.9	376.8	377.8
20°	367.2	368.2	371.0	371.0	373.0
22.5°	359.5	359.5	363.3	364.3	367.2
25°	349.8	351.8	355.6	358.5	360.4
27.5°	341.2	343.1	347.0	350.8	353.7
30°	331.5	333.5	337.3	343.1	347.0
32.5°	320.9	322.9	328.6	335.4	339.2
35°	310.3	312.3	319.0	327.7	332.5
37.5°	298.8	301.7	309.4	319.0	324.8
40°	287.2	290.1	298.8	309.4	318.0
42.5°	273.7	277.6	287.2	301.7	311.3
45°	260.2	265.0	276.6	293.9	304.5
47.5°	245.8	250.6	264.1	286.2	297.8
50°	231.3	237.1	253.5	277.6	290.1
52.5°	215.9	221.7	242.9	268.9	282.4
55°	199.5	208.2	232.3	259.2	272.7
57.5°	183.1	192.8	219.7	248.6	263.1
60°	165.8	177.3	208.2	237.1	251.5
62.5°	149.4	161.9	195.6	224.6	239.0
65°	132.0	146.5	182.1	211.1	224.6
67.5°	113.7	132.0	166.7	194.7	208.2
70°	95.4	116.6	151.3	177.3	189.9
72.5°	79.0	101.2	134.0	156.1	156.1
75°	62.6	84.8	114.7	116.6	113.7
77.5°	48.2	69.4	89.6	81.9	83.8
80°	35.7	53.0	56.9	59.8	61.7
82.5°	24.1	35.7	36.6	38.6	38.6
85°	15.4	18.3	19.3	18.3	17.3
87.5°	6.7	7.7	5.8	3.9	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)