

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: P230808

Luminaire Tested: **22CZ-LD5-34-SQP-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230808
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-LD5-34-SQP-UNV-L930-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SQP LENS
Light Source: (84) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2001.0 lumens
Efficiency: N/A
Efficacy: 68.1 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

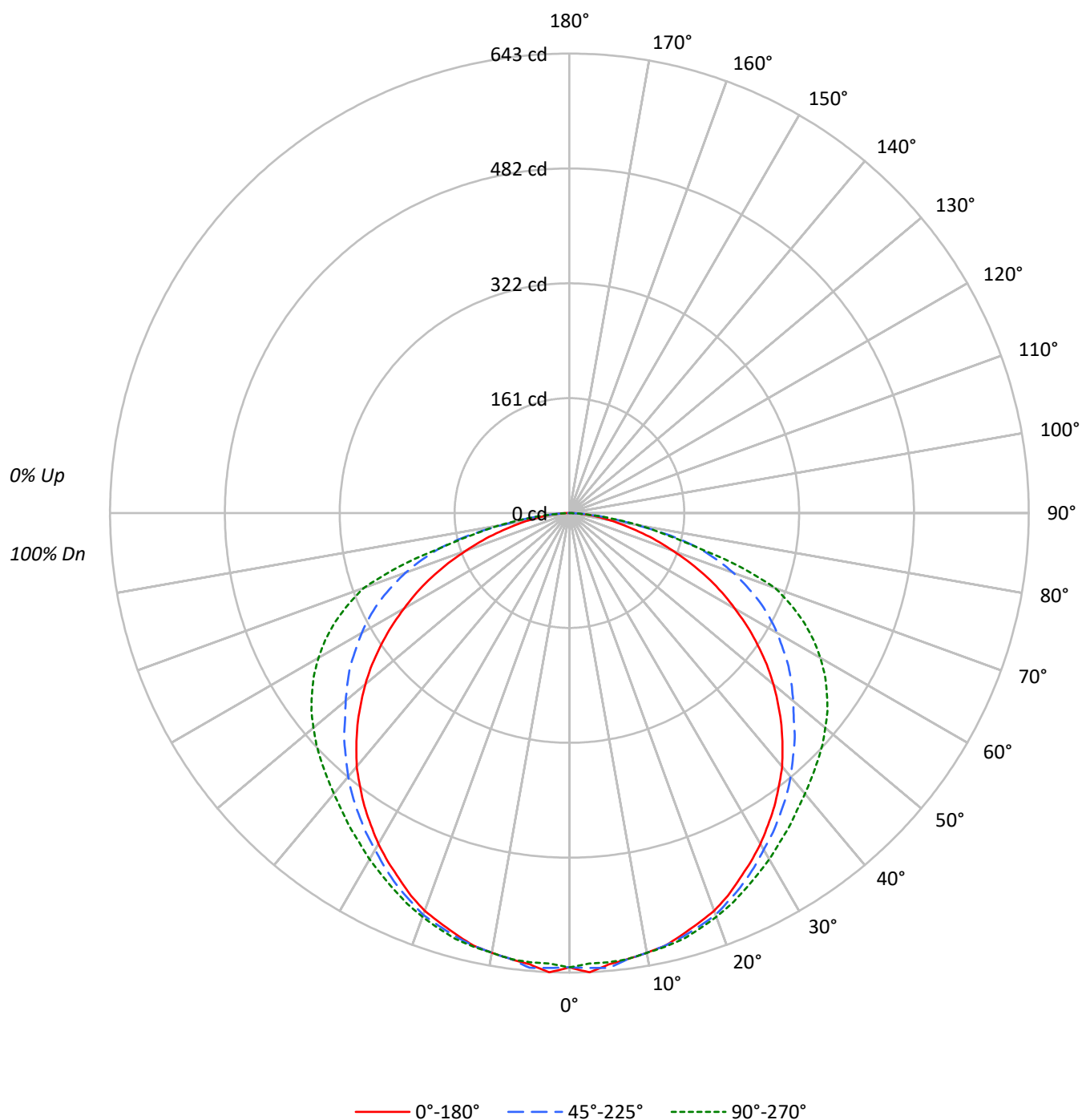
Input Watts (W): 29.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1710	1710	1710
5°	1713	1725	1704
10°	1707	1707	1707
15°	1701	1710	1719
20°	1696	1713	1722
25°	1675	1703	1726
30°	1661	1690	1738
35°	1644	1690	1761
40°	1627	1692	1801
45°	1597	1697	1869
50°	1562	1711	1958
55°	1509	1757	2063
60°	1439	1807	2183
65°	1356	1870	2306
70°	1210	1920	2408
75°	1050	1922	1907
80°	891	1421	1542
85°	769	960	865



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.3	3.0
10°-20°	173.3	8.7
20°-30°	264.1	13.2
30°-40°	323.1	16.1
40°-50°	347.7	17.4
50°-60°	336.8	16.8
60°-70°	285.3	14.3
70°-80°	172.4	8.6
80°-90°	37.9	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°	497.7	24.9
0°-40°	820.9	41.0
0°-60°	1505.4	75.2
0°-90°	2001.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2001.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	636	636	636	636	636	
5°	634	634	639	636	631	60
15°	611	612	614	615	617	172
25°	564	567	573	578	581	260
35°	500	504	514	528	536	313
45°	420	427	446	474	491	323
55°	322	336	374	418	440	287
65°	213	236	294	340	362	210
75°	101	137	185	188	183	109
85°	25	30	31	30	28	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	635.6	635.6	635.6	635.6	635.6
2.5°	643.3	641.8	637.1	634.0	630.9
5°	634.0	634.0	638.7	635.6	630.9
7.5°	629.4	629.4	629.4	637.1	629.4
10°	624.7	626.2	624.7	630.9	624.7
12.5°	620.0	620.0	620.0	621.6	621.6
15°	610.7	612.3	613.8	615.4	616.9
17.5°	601.4	602.9	606.0	607.6	609.2
20°	592.1	593.6	598.3	598.3	601.4
22.5°	579.6	579.6	585.8	587.4	592.1
25°	564.1	567.2	573.4	578.1	581.2
27.5°	550.1	553.2	559.4	565.6	570.3
30°	534.6	537.7	543.9	553.2	559.4
32.5°	517.5	520.6	529.9	540.8	547.0
35°	500.4	503.5	514.4	528.3	536.1
37.5°	481.7	486.4	498.8	514.4	523.7
40°	463.1	467.7	481.7	498.8	512.8
42.5°	441.3	447.5	463.1	486.4	501.9
45°	419.6	427.3	446.0	474.0	491.1
47.5°	396.3	404.0	425.8	461.5	480.2
50°	373.0	382.3	408.7	447.5	467.7
52.5°	348.1	357.4	391.6	433.6	455.3
55°	321.7	335.7	374.5	418.0	439.8
57.5°	295.3	310.8	354.3	400.9	424.2
60°	267.3	285.9	335.7	382.3	405.6
62.5°	240.9	261.1	315.5	362.1	385.4
65°	212.9	236.2	293.7	340.3	362.1
67.5°	183.4	212.9	268.8	313.9	335.7
70°	153.8	188.0	244.0	285.9	306.1
72.5°	127.4	163.2	216.0	251.7	251.7
75°	101.0	136.7	184.9	188.0	183.4
77.5°	77.7	111.9	144.5	132.1	135.2
80°	57.5	85.5	91.7	96.3	99.5
82.5°	38.8	57.5	59.1	62.2	62.2
85°	24.9	29.5	31.1	29.5	28.0
87.5°	10.9	12.4	9.3	6.2	4.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)