

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: P230605

Luminaire Tested: **22CZ-LD5-24SE-S-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230605
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-LD5-24SE-S-UNV-L935-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SMOOTH LENS
Light Source: (56) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2167.0 lumens
Efficiency: N/A
Efficacy: 102.7 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

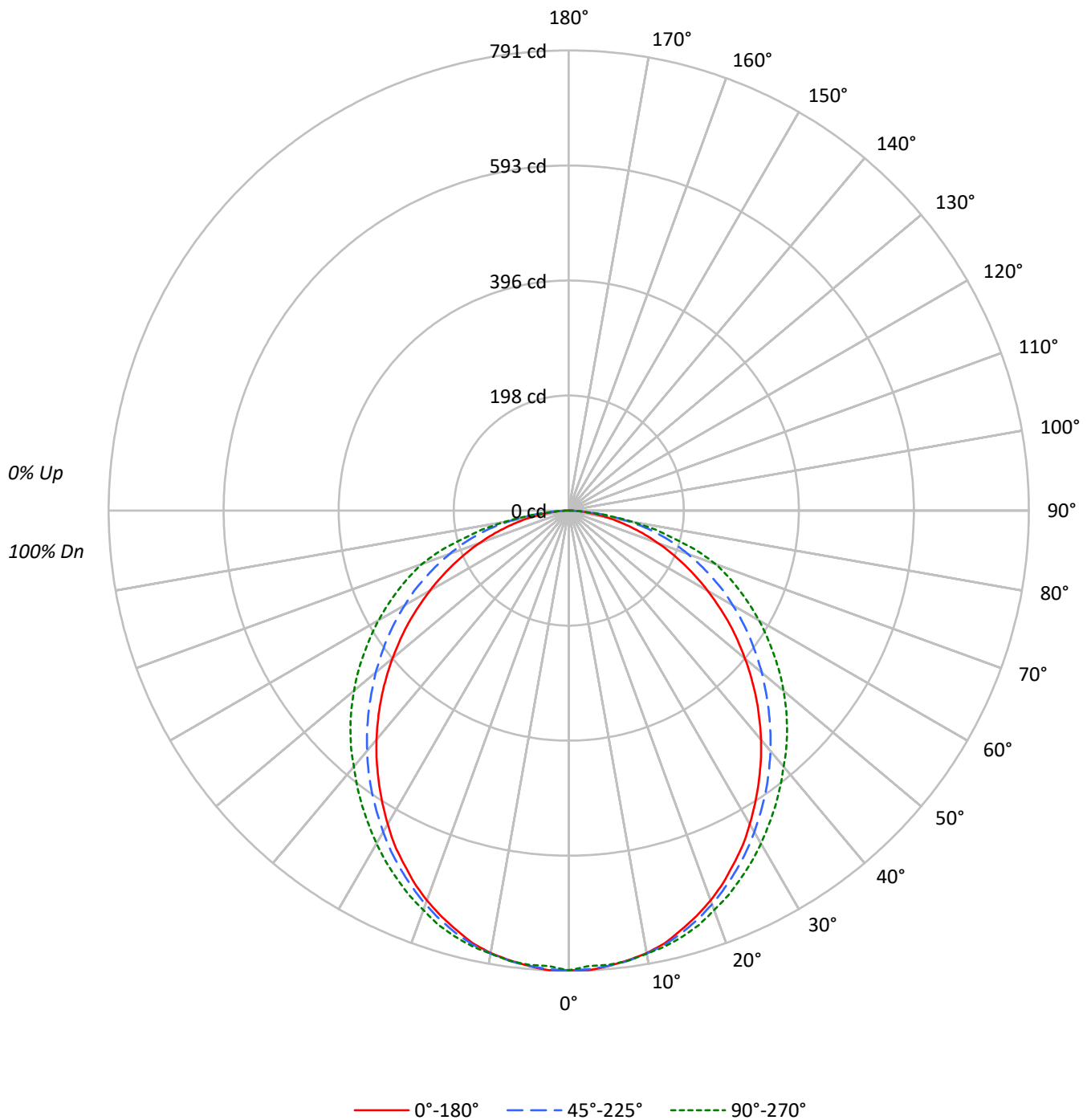
Input Watts (W): 21.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	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			100
1	109	104	99	95	106	101	97	94		97	94	91			93	91	88			83
2	99	90	83	77	96	88	82	77		85	79	75			81	77	73			69
3	90	79	71	64	87	78	70	64		75	68	63			72	66	62			58
4	82	70	61	54	80	69	61	54		66	59	53			64	58	53			50
5	76	63	54	47	74	62	53	47		59	52	46			57	51	46			43
6	70	56	47	41	68	56	47	41		54	46	40			52	45	40			38
7	65	51	42	36	63	50	42	36		49	41	36			47	41	36			33
8	60	47	38	32	59	46	38	32		45	37	32			43	37	32			30
9	56	43	35	29	55	42	34	29		41	34	29			40	34	29			27
10	53	40	32	26	52	39	32	26		38	31	26			37	31	26			24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2126	2126	2126
5°	2123	2123	2117
10°	2110	2113	2113
15°	2079	2094	2111
20°	2042	2063	2092
25°	1990	2024	2074
30°	1934	1982	2054
35°	1870	1939	2034
40°	1806	1894	2018
45°	1735	1850	2020
50°	1656	1813	2017
55°	1577	1782	2017
60°	1484	1753	2033
65°	1392	1730	2061
70°	1286	1711	2113
75°	1158	1699	1959
80°	1017	1581	1709
85°	837	1189	1059



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.6	3.4
10°-20°	211.9	9.8
20°-30°	314.8	14.5
30°-40°	370.5	17.1
40°-50°	377.7	17.4
50°-60°	340.7	15.7
60°-70°	268.3	12.4
70°-80°	165.5	7.6
80°-90°	43.0	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°	601.3	27.7
0°-40°	971.8	44.8
0°-60°	1690.2	78.0
0°-90°	2167.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2167.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	790	790	790	790	790	
5°	786	787	786	785	784	75
15°	746	749	752	756	758	210
25°	670	674	682	693	698	309
35°	569	576	590	609	619	356
45°	456	463	486	515	531	351
55°	336	348	380	414	430	300
65°	219	234	272	306	324	217
75°	111	130	163	182	188	119
85°	27	34	38	36	34	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	790.0	790.0	790.0	790.0	790.0
2.5°	791.0	791.0	789.0	786.9	783.8
5°	785.8	786.9	785.8	784.8	783.8
7.5°	779.6	780.6	780.6	780.6	780.6
10°	772.3	773.3	773.3	773.3	773.3
12.5°	761.9	762.9	764.0	765.0	767.1
15°	746.3	749.4	751.5	755.7	757.7
17.5°	730.7	733.8	736.9	742.1	746.3
20°	713.0	715.1	720.3	726.5	730.7
22.5°	693.2	696.3	701.5	709.9	716.1
25°	670.3	674.5	681.8	693.2	698.4
27.5°	648.4	651.6	660.9	673.4	680.7
30°	622.4	626.6	638.0	653.6	660.9
32.5°	596.4	601.6	614.1	631.8	640.1
35°	569.3	575.6	590.2	608.9	619.3
37.5°	542.3	548.5	565.2	586.0	597.4
40°	514.2	520.4	539.2	562.1	574.5
42.5°	485.0	492.3	513.1	539.2	553.7
45°	455.9	463.2	486.1	515.2	530.8
47.5°	425.7	434.0	459.0	491.3	506.9
50°	395.5	404.9	433.0	466.3	481.9
52.5°	365.3	375.7	405.9	440.3	456.9
55°	336.2	347.6	379.9	414.3	429.9
57.5°	305.0	318.5	352.8	386.2	403.8
60°	275.8	290.4	325.8	359.1	377.8
62.5°	246.7	262.3	299.8	333.1	350.8
65°	218.6	234.2	271.7	306.0	323.7
67.5°	190.5	208.2	244.6	278.9	296.6
70°	163.4	182.1	217.5	250.8	268.5
72.5°	137.4	156.1	191.5	222.7	233.1
75°	111.4	130.1	163.4	182.1	188.4
77.5°	87.4	105.1	134.3	145.7	154.0
80°	65.6	81.2	102.0	109.3	110.3
82.5°	44.8	58.3	70.8	71.8	70.8
85°	27.1	34.3	38.5	36.4	34.3
87.5°	12.5	13.5	12.5	8.3	5.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)