

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: P230559

Luminaire Tested: **22CZ-LD5-20SE-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230559
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-LD5-20SE-UNV-L950-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH RIBBED LENS
Light Source: (56) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1986.0 lumens
Efficiency: N/A
Efficacy: 115.5 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

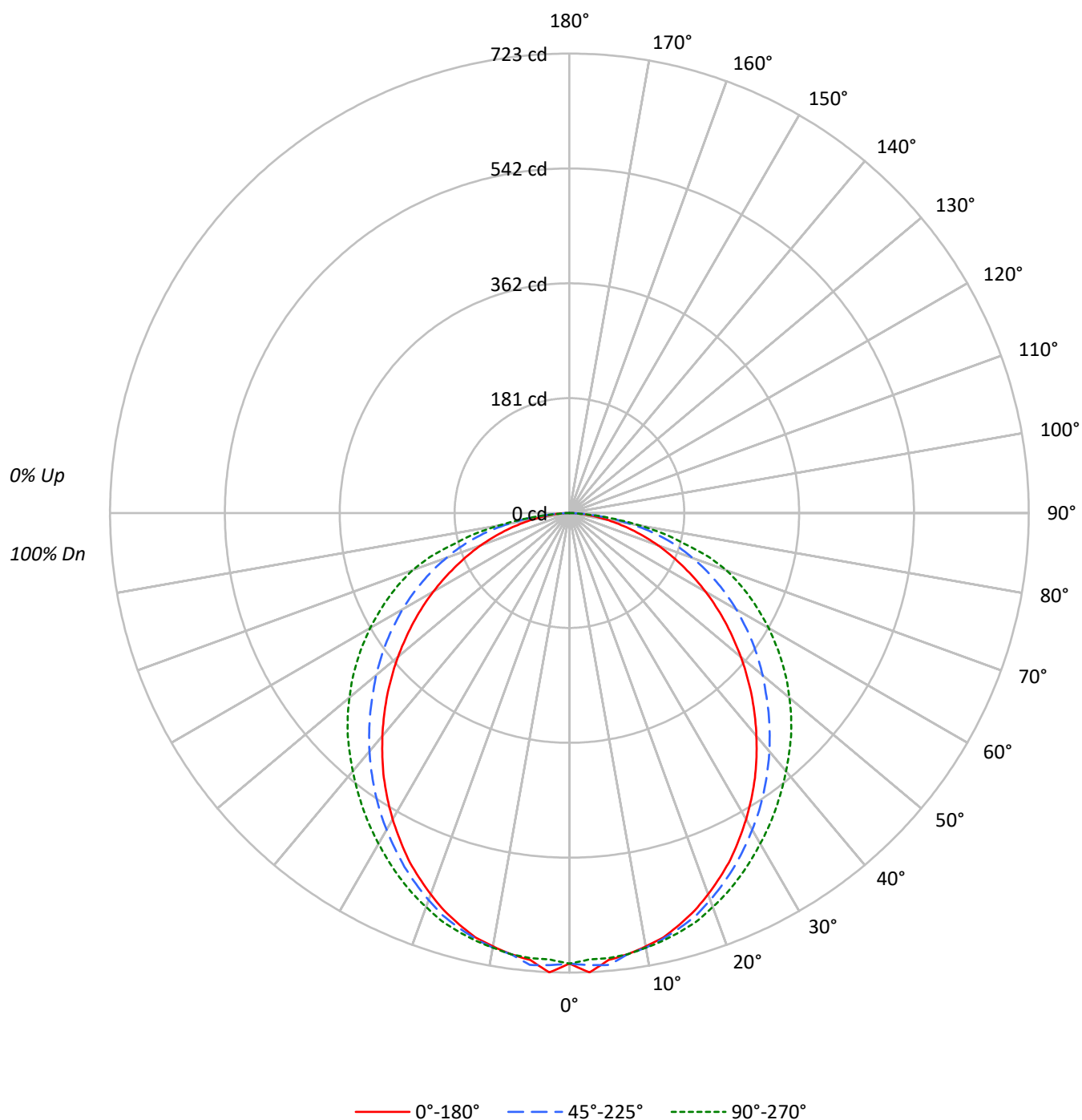
Input Watts (W): 17.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1908	1908	1908
5°	1907	1928	1899
10°	1892	1897	1897
15°	1867	1881	1897
20°	1828	1856	1889
25°	1784	1824	1878
30°	1729	1789	1867
35°	1672	1755	1862
40°	1608	1720	1862
45°	1544	1687	1878
50°	1476	1662	1892
55°	1405	1645	1917
60°	1330	1632	1949
65°	1248	1624	1999
70°	1163	1618	2067
75°	1054	1617	1958
80°	913	1497	1736
85°	775	1133	1102



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.2	3.4
10°-20°	190.4	9.6
20°-30°	283.3	14.3
30°-40°	335.1	16.9
40°-50°	344.4	17.3
50°-60°	314.7	15.8
60°-70°	251.7	12.7
70°-80°	158.0	8.0
80°-90°	41.1	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°	541.0	27.2
0°-40°	876.1	44.1
0°-60°	1535.1	77.3
0°-90°	1986.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1986.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	709	709	709	709	709	
5°	706	706	714	709	703	67
15°	670	671	675	679	681	189
25°	601	605	614	625	633	276
35°	509	516	534	554	567	318
45°	406	416	443	476	494	313
55°	299	314	351	389	408	268
65°	196	213	255	294	314	195
75°	101	121	156	179	188	108
85°	25	32	37	36	36	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	708.9	708.9	708.9	708.9	708.9
2.5°	723.4	720.5	711.8	706.0	703.1
5°	706.0	706.0	713.7	708.9	703.1
7.5°	700.2	700.2	700.2	714.7	700.2
10°	692.5	693.4	694.4	700.2	694.4
12.5°	683.8	683.8	685.7	687.6	688.6
15°	670.2	671.2	675.1	678.9	680.9
17.5°	655.8	658.7	663.5	668.3	672.2
20°	638.4	642.2	648.0	655.8	659.6
22.5°	620.0	623.9	631.6	640.3	647.1
25°	600.7	604.6	614.2	624.8	632.6
27.5°	578.5	583.3	594.9	609.4	617.1
30°	556.3	562.1	575.6	592.0	600.7
32.5°	533.1	539.9	555.3	573.7	584.3
35°	509.0	515.7	534.1	554.3	566.9
37.5°	483.8	491.6	511.9	535.0	548.6
40°	457.8	466.5	489.6	514.8	530.2
42.5°	431.7	441.4	466.5	496.4	511.9
45°	405.6	416.2	443.3	476.1	493.5
47.5°	378.6	391.1	419.1	455.8	473.2
50°	352.5	365.1	396.9	434.6	452.0
52.5°	325.5	339.9	373.8	412.4	430.7
55°	299.4	313.9	350.6	389.2	408.5
57.5°	273.3	287.8	326.4	366.0	385.3
60°	247.2	262.7	303.2	341.9	362.2
62.5°	221.2	237.6	279.1	318.7	338.0
65°	196.0	213.4	255.0	293.6	313.9
67.5°	171.9	190.3	230.8	268.5	288.8
70°	147.8	166.1	205.7	242.4	262.7
72.5°	124.6	142.9	181.6	214.4	229.9
75°	101.4	120.7	155.5	178.7	188.3
77.5°	79.2	98.5	128.4	143.9	154.5
80°	58.9	75.3	96.6	108.2	112.0
82.5°	40.6	54.1	67.6	70.5	72.4
85°	25.1	31.9	36.7	35.7	35.7
87.5°	11.6	12.6	10.6	7.7	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)