

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: P230558

Luminaire Tested: **22CZ-LD5-20SE-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230558
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-L940-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH RIBBED LENS
Light Source: (56) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1825.0 lumens
Efficiency: N/A
Efficacy: 106.1 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

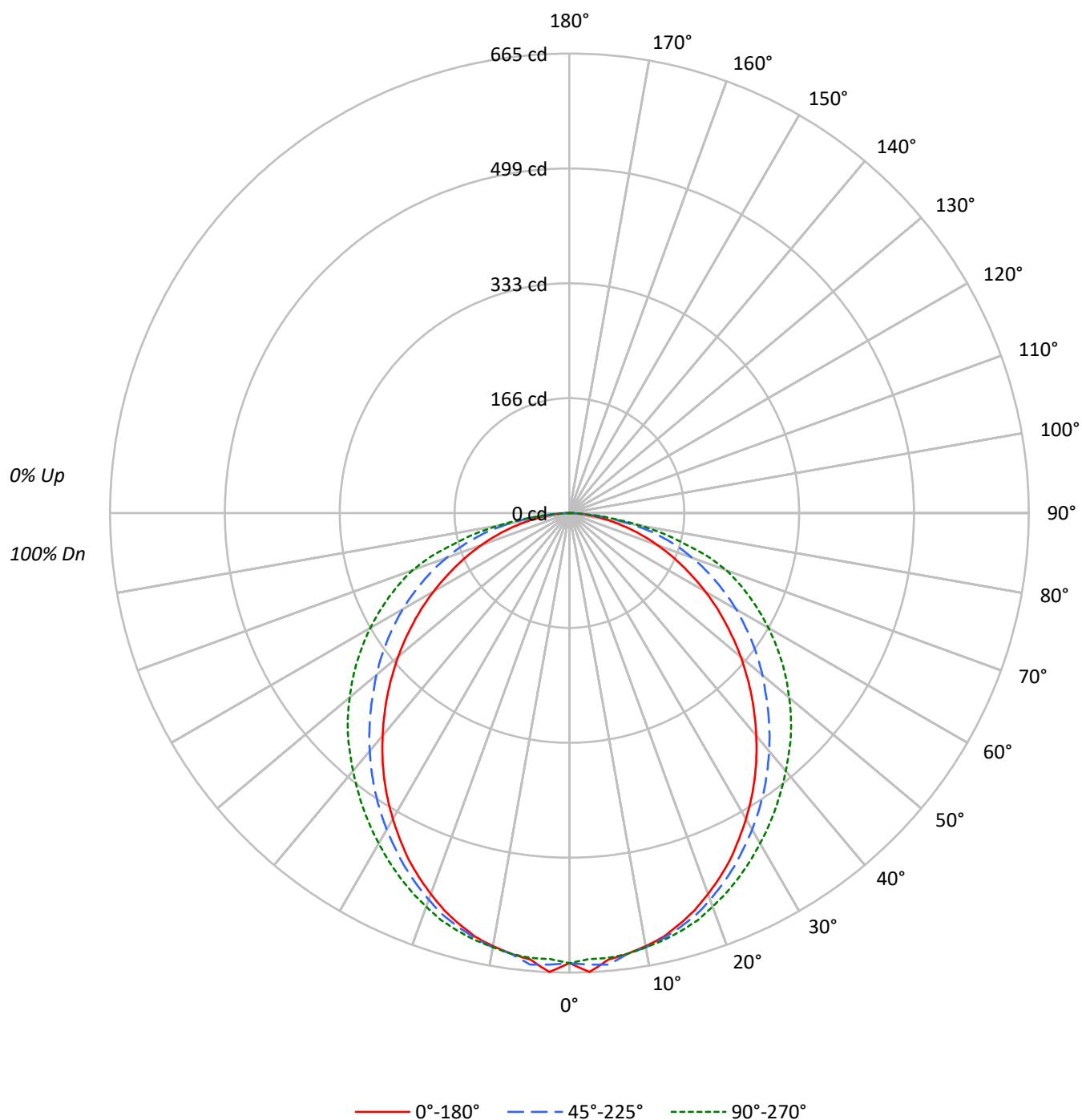
Input Watts (W): 17.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	108	104	99	95	106	101	97	94		97	94	91		93	90	88		89	87	85
2	98	90	83	77	96	88	82	76		84	79	74		81	77	73		78	74	71
3	90	79	70	64	87	77	69	63		74	68	62		71	66	61		69	64	60
4	82	70	61	54	80	68	60	54		66	59	53		64	57	52		61	56	51
5	75	62	53	46	73	61	53	46		59	51	46		57	50	45		55	49	45
6	70	56	47	41	68	55	47	40		53	46	40		52	45	40		50	44	39
7	65	51	42	36	63	50	42	36		48	41	35		47	40	35		46	40	35
8	60	46	38	32	58	46	38	32		44	37	32		43	36	31		42	36	31
9	56	43	34	29	55	42	34	29		41	34	29		40	33	28		39	33	28
10	53	39	31	26	51	39	31	26		38	31	26		37	30	26		36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1753	1753	1753
5°	1752	1771	1745
10°	1739	1744	1744
15°	1716	1728	1743
20°	1680	1705	1736
25°	1639	1676	1726
30°	1588	1643	1715
35°	1536	1612	1711
40°	1478	1580	1711
45°	1418	1550	1726
50°	1356	1527	1739
55°	1291	1512	1761
60°	1223	1500	1791
65°	1147	1492	1836
70°	1068	1487	1899
75°	969	1486	1800
80°	838	1375	1595
85°	713	1041	1013



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.8	3.4
10°-20°	175.0	9.6
20°-30°	260.3	14.3
30°-40°	307.9	16.9
40°-50°	316.5	17.3
50°-60°	289.2	15.8
60°-70°	231.3	12.7
70°-80°	145.2	8.0
80°-90°	37.8	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°	497.1	27.2
0°-40°	805.0	44.1
0°-60°	1410.7	77.3
0°-90°	1825.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1825.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	651	651	651	651	651	
5°	649	649	656	651	646	62
15°	616	617	620	624	626	173
25°	552	556	564	574	581	254
35°	468	474	491	509	521	292
45°	373	382	407	438	454	287
55°	275	288	322	358	375	246
65°	180	196	234	270	288	179
75°	93	111	143	164	173	99
85°	23	29	34	33	33	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	651.4	651.4	651.4	651.4	651.4
2.5°	664.7	662.1	654.1	648.7	646.1
5°	648.7	648.7	655.8	651.4	646.1
7.5°	643.4	643.4	643.4	656.7	643.4
10°	636.3	637.2	638.1	643.4	638.1
12.5°	628.3	628.3	630.1	631.9	632.8
15°	615.9	616.8	620.3	623.9	625.7
17.5°	602.6	605.3	609.7	614.1	617.7
20°	586.6	590.2	595.5	602.6	606.1
22.5°	569.8	573.3	580.4	588.4	594.6
25°	552.0	555.6	564.4	574.2	581.3
27.5°	531.6	536.0	546.7	560.0	567.1
30°	511.2	516.5	528.9	544.0	552.0
32.5°	489.9	496.1	510.3	527.2	536.9
35°	467.7	473.9	490.8	509.4	520.9
37.5°	444.6	451.7	470.4	491.7	504.1
40°	420.7	428.6	449.9	473.0	487.2
42.5°	396.7	405.6	428.6	456.2	470.4
45°	372.7	382.5	407.3	437.5	453.5
47.5°	347.9	359.4	385.2	418.9	434.9
50°	323.9	335.5	364.8	399.4	415.3
52.5°	299.1	312.4	343.5	379.0	395.8
55°	275.1	288.4	322.2	357.7	375.4
57.5°	251.2	264.5	300.0	336.4	354.1
60°	227.2	241.4	278.7	314.2	332.8
62.5°	203.2	218.3	256.5	292.9	310.6
65°	180.2	196.1	234.3	269.8	288.4
67.5°	158.0	174.8	212.1	246.7	265.4
70°	135.8	152.6	189.0	222.8	241.4
72.5°	114.5	131.3	166.8	197.0	211.2
75°	93.2	110.9	142.9	164.2	173.1
77.5°	72.8	90.5	118.0	132.2	142.0
80°	54.1	69.2	88.7	99.4	102.9
82.5°	37.3	49.7	62.1	64.8	66.6
85°	23.1	29.3	33.7	32.8	32.8
87.5°	10.6	11.5	9.8	7.1	4.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)