

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: P230576

Luminaire Tested: **22CZ-LD5-20-S-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230576
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-LD5-20-S-UNV-L930-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SMOOTH LENS
Light Source: (84) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1763.0 lumens
Efficiency: N/A
Efficacy: 107.5 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

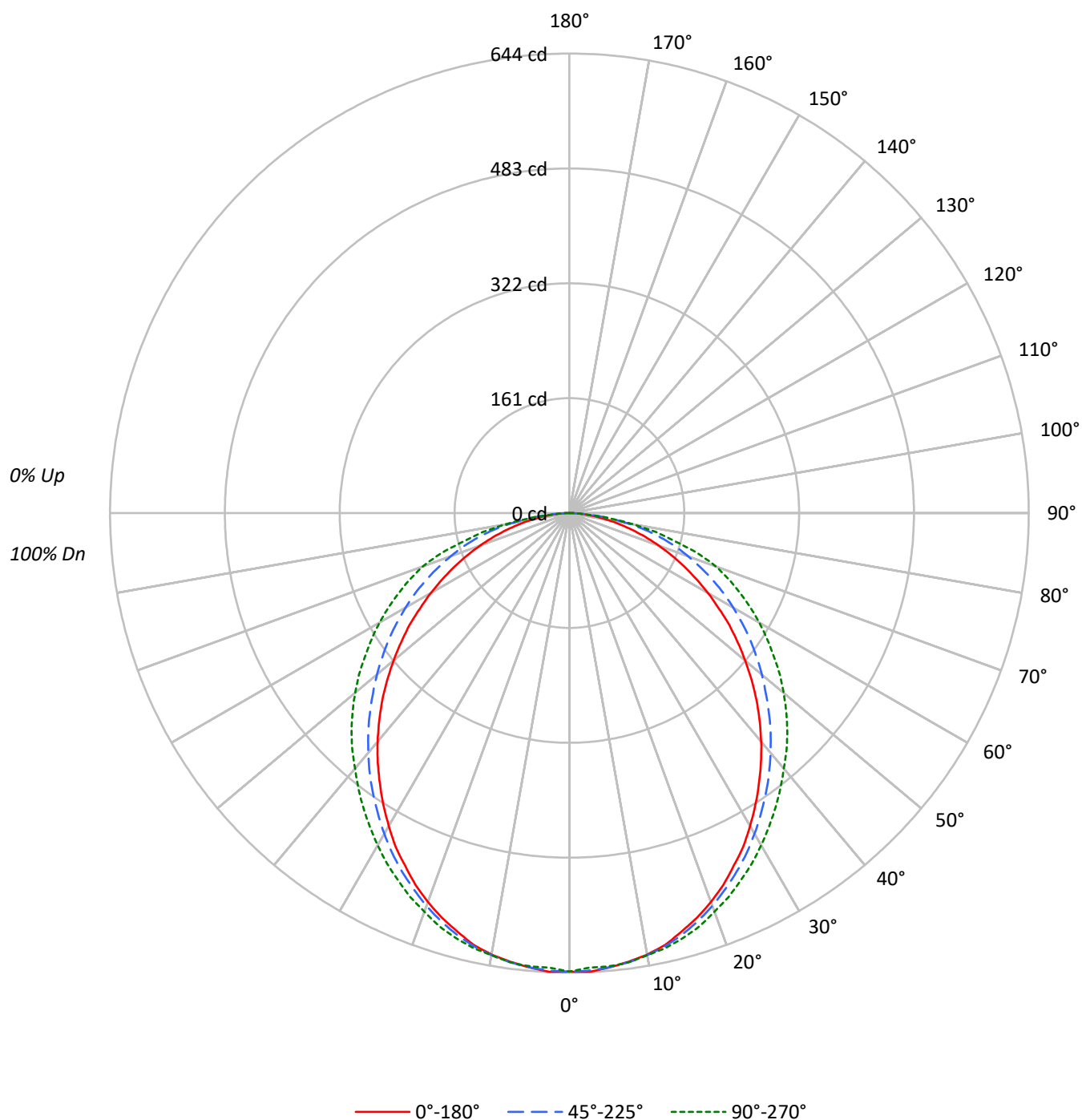
Input Watts (W): 16.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
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	109	104	99	95	106	101	97	94		97	94	91		93	91	88		90	87	85
2	99	90	83	77	96	88	82	77		85	79	75		81	77	73		78	75	71
3	90	79	71	64	87	78	70	64		75	68	63		72	66	62		69	64	60
4	82	70	61	54	80	69	61	54		66	59	53		64	58	53		62	56	52
5	76	63	54	47	74	62	53	47		59	52	46		57	51	46		56	50	45
6	70	56	47	41	68	56	47	41		54	46	40		52	45	40		50	44	40
7	65	51	42	36	63	50	42	36		49	41	36		47	41	36		46	40	35
8	60	47	38	32	59	46	38	32		45	37	32		43	37	32		42	36	32
9	56	43	35	29	55	42	34	29		41	34	29		40	34	29		39	33	29
10	53	40	32	26	52	39	32	26		38	31	26		37	31	26		36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1729	1729	1729
5°	1727	1727	1722
10°	1717	1719	1719
15°	1692	1703	1718
20°	1661	1678	1702
25°	1619	1647	1687
30°	1574	1613	1671
35°	1522	1577	1655
40°	1469	1541	1642
45°	1412	1505	1644
50°	1347	1475	1641
55°	1283	1450	1641
60°	1208	1426	1654
65°	1132	1407	1677
70°	1046	1393	1719
75°	942	1382	1594
80°	826	1286	1392
85°	679	966	861



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.7	3.4
10°-20°	172.4	9.8
20°-30°	256.1	14.5
30°-40°	301.4	17.1
40°-50°	307.3	17.4
50°-60°	277.2	15.7
60°-70°	218.3	12.4
70°-80°	134.7	7.6
80°-90°	35.0	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°	489.2	27.7
0°-40°	790.6	44.8
0°-60°	1375.1	78.0
0°-90°	1763.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1763.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	643	643	643	643	643	
5°	639	640	639	638	638	61
15°	607	610	611	615	616	171
25°	545	549	555	564	568	251
35°	463	468	480	495	504	290
45°	371	377	396	419	432	286
55°	274	283	309	337	350	244
65°	178	190	221	249	263	176
75°	91	106	133	148	153	97
85°	22	28	31	30	28	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	642.7	642.7	642.7	642.7	642.7
2.5°	643.6	643.6	641.9	640.2	637.6
5°	639.3	640.2	639.3	638.5	637.6
7.5°	634.2	635.1	635.1	635.1	635.1
10°	628.3	629.2	629.2	629.2	629.2
12.5°	619.9	620.7	621.5	622.4	624.1
15°	607.2	609.7	611.4	614.8	616.5
17.5°	594.5	597.0	599.5	603.8	607.2
20°	580.1	581.7	586.0	591.1	594.5
22.5°	564.0	566.5	570.7	577.5	582.6
25°	545.3	548.7	554.7	564.0	568.2
27.5°	527.6	530.1	537.7	547.9	553.8
30°	506.4	509.8	519.1	531.8	537.7
32.5°	485.2	489.4	499.6	514.0	520.8
35°	463.2	468.3	480.1	495.4	503.8
37.5°	441.2	446.3	459.8	476.7	486.1
40°	418.3	423.4	438.6	457.3	467.4
42.5°	394.6	400.5	417.5	438.6	450.5
45°	370.9	376.8	395.5	419.2	431.9
47.5°	346.3	353.1	373.4	399.7	412.4
50°	321.8	329.4	352.3	379.4	392.1
52.5°	297.2	305.7	330.3	358.2	371.7
55°	273.5	282.8	309.1	337.0	349.7
57.5°	248.1	259.1	287.1	314.2	328.6
60°	224.4	236.3	265.0	292.1	307.4
62.5°	200.7	213.4	243.9	271.0	285.4
65°	177.8	190.5	221.0	249.0	263.4
67.5°	155.0	169.4	199.0	226.9	241.3
70°	132.9	148.2	177.0	204.1	218.5
72.5°	111.8	127.0	155.8	181.2	189.7
75°	90.6	105.8	132.9	148.2	153.3
77.5°	71.1	85.5	109.2	118.6	125.3
80°	53.3	66.1	83.0	88.9	89.8
82.5°	36.4	47.4	57.6	58.4	57.6
85°	22.0	27.9	31.3	29.6	27.9
87.5°	10.2	11.0	10.2	6.8	4.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)