

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: P230578

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230578
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-L940-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SMOOTH LENS
Light Source: (84) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1877.0 lumens
Efficiency: N/A
Efficacy: 114.5 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

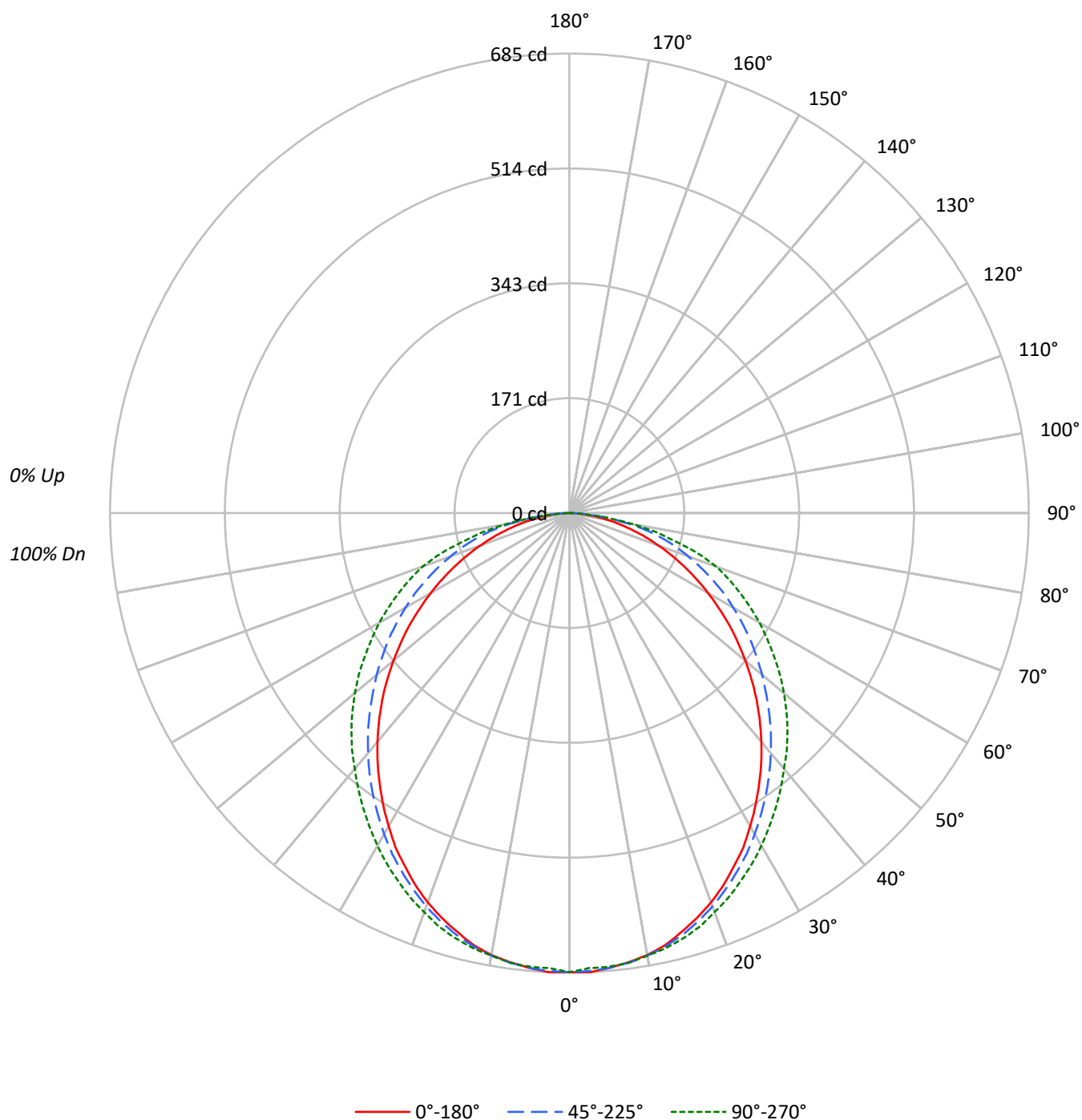
Input Watts (W): 16.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1841	1841	1841
5°	1839	1839	1834
10°	1828	1830	1830
15°	1801	1813	1828
20°	1769	1787	1812
25°	1724	1753	1796
30°	1675	1717	1779
35°	1620	1679	1762
40°	1565	1640	1748
45°	1503	1602	1750
50°	1434	1570	1747
55°	1366	1544	1747
60°	1286	1519	1762
65°	1205	1498	1785
70°	1113	1482	1830
75°	1003	1471	1697
80°	880	1370	1481
85°	722	1031	920



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.6	3.4
10°-20°	183.6	9.8
20°-30°	272.6	14.5
30°-40°	320.9	17.1
40°-50°	327.2	17.4
50°-60°	295.1	15.7
60°-70°	232.4	12.4
70°-80°	143.4	7.6
80°-90°	37.2	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°	520.8	27.7
0°-40°	841.7	44.8
0°-60°	1464.0	78.0
0°-90°	1877.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1877.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	684	684	684	684	684	
5°	681	682	681	680	679	65
15°	646	649	651	654	656	182
25°	581	584	590	600	605	268
35°	493	499	511	527	536	308
45°	395	401	421	446	460	304
55°	291	301	329	359	372	260
65°	189	203	235	265	280	188
75°	96	113	142	158	163	103
85°	23	30	33	32	30	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	684.3	684.3	684.3	684.3	684.3
2.5°	685.2	685.2	683.4	681.6	678.9
5°	680.7	681.6	680.7	679.8	678.9
7.5°	675.3	676.2	676.2	676.2	676.2
10°	669.0	669.9	669.9	669.9	669.9
12.5°	659.9	660.8	661.7	662.6	664.4
15°	646.4	649.1	650.9	654.5	656.3
17.5°	632.9	635.6	638.3	642.8	646.4
20°	617.6	619.4	623.9	629.3	632.9
22.5°	600.4	603.1	607.6	614.9	620.3
25°	580.6	584.2	590.5	600.4	604.9
27.5°	561.7	564.4	572.5	583.3	589.6
30°	539.1	542.7	552.7	566.2	572.5
32.5°	516.6	521.1	531.9	547.2	554.5
35°	493.1	498.6	511.2	527.4	536.4
37.5°	469.7	475.1	489.5	507.6	517.5
40°	445.4	450.8	467.0	486.8	497.7
42.5°	420.1	426.4	444.5	467.0	479.6
45°	394.9	401.2	421.0	446.3	459.8
47.5°	368.7	375.9	397.6	425.5	439.1
50°	342.6	350.7	375.0	403.9	417.4
52.5°	316.4	325.5	351.6	381.4	395.8
55°	291.2	301.1	329.1	358.8	372.3
57.5°	264.2	275.9	305.6	334.5	349.8
60°	238.9	251.5	282.2	311.0	327.3
62.5°	213.7	227.2	259.6	288.5	303.8
65°	189.3	202.8	235.3	265.1	280.4
67.5°	165.0	180.3	211.9	241.6	256.9
70°	141.5	157.8	188.4	217.3	232.6
72.5°	119.0	135.2	165.9	192.9	201.9
75°	96.5	112.7	141.5	157.8	163.2
77.5°	75.7	91.1	116.3	126.2	133.4
80°	56.8	70.3	88.4	94.7	95.6
82.5°	38.8	50.5	61.3	62.2	61.3
85°	23.4	29.8	33.4	31.6	29.8
87.5°	10.8	11.7	10.8	7.2	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)