

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: P230557

Luminaire Tested: **22CZ-LD5-20SE-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230557
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-L935-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH RIBBED LENS
Light Source: (56) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1781.0 lumens
Efficiency: N/A
Efficacy: 103.5 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

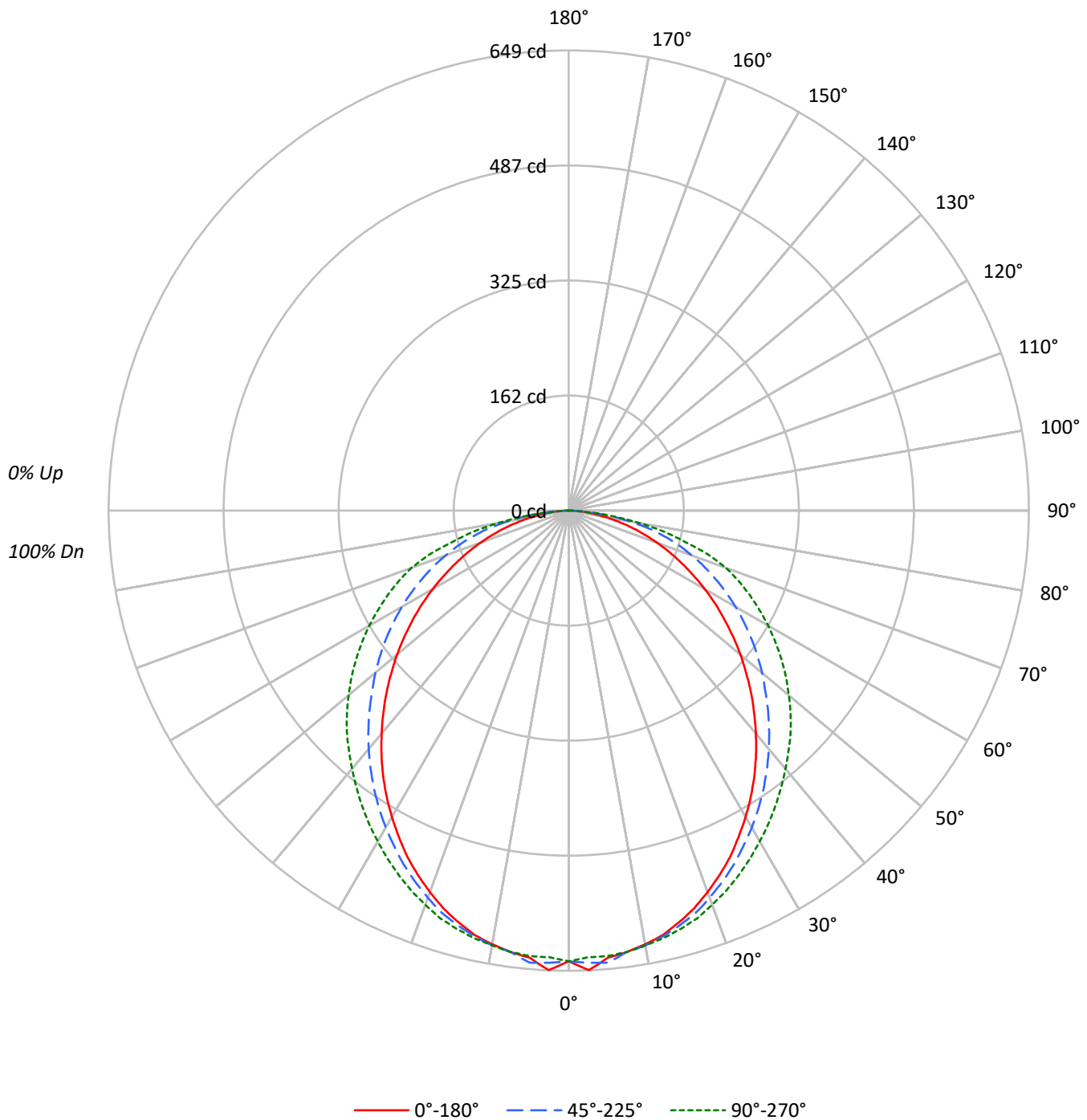
Input Watts (W): 17.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83		
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69		
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58		
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49		
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43		
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37		
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33		
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29		
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26		
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1711	1711	1711
5°	1710	1729	1703
10°	1697	1702	1702
15°	1675	1687	1701
20°	1639	1664	1694
25°	1599	1635	1684
30°	1550	1604	1674
35°	1499	1573	1670
40°	1442	1542	1670
45°	1384	1513	1684
50°	1323	1490	1697
55°	1260	1475	1719
60°	1193	1463	1748
65°	1119	1456	1792
70°	1042	1452	1854
75°	945	1449	1756
80°	818	1342	1557
85°	695	1016	988



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.3	3.4
10°-20°	170.8	9.6
20°-30°	254.1	14.3
30°-40°	300.5	16.9
40°-50°	308.8	17.3
50°-60°	282.2	15.8
60°-70°	225.8	12.7
70°-80°	141.7	8.0
80°-90°	36.9	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°	485.1	27.2
0°-40°	785.6	44.1
0°-60°	1376.7	77.3
0°-90°	1781.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1781.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	636	636	636	636	636	
5°	633	633	640	636	630	60
15°	601	602	605	609	611	169
25°	539	542	551	560	567	248
35°	456	462	479	497	508	285
45°	364	373	398	427	443	280
55°	268	282	314	349	366	240
65°	176	191	229	263	282	174
75°	91	108	139	160	169	97
85°	22	29	33	32	32	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	635.7	635.7	635.7	635.7	635.7
2.5°	648.7	646.1	638.3	633.1	630.5
5°	633.1	633.1	640.0	635.7	630.5
7.5°	627.9	627.9	627.9	640.9	627.9
10°	621.0	621.8	622.7	627.9	622.7
12.5°	613.2	613.2	614.9	616.6	617.5
15°	601.1	601.9	605.4	608.9	610.6
17.5°	588.1	590.7	595.0	599.3	602.8
20°	572.5	575.9	581.1	588.1	591.5
22.5°	556.0	559.5	566.4	574.2	580.3
25°	538.7	542.2	550.8	560.4	567.3
27.5°	518.8	523.1	533.5	546.5	553.4
30°	498.9	504.1	516.2	530.9	538.7
32.5°	478.1	484.1	498.0	514.4	524.0
35°	456.4	462.5	478.9	497.1	508.4
37.5°	433.9	440.8	459.0	479.8	491.9
40°	410.5	418.3	439.1	461.6	475.5
42.5°	387.1	395.8	418.3	445.2	459.0
45°	363.8	373.3	397.5	427.0	442.6
47.5°	339.5	350.8	375.9	408.8	424.4
50°	316.1	327.4	356.0	389.7	405.3
52.5°	291.9	304.9	335.2	369.8	386.3
55°	268.5	281.5	314.4	349.0	366.3
57.5°	245.1	258.1	292.7	328.2	345.6
60°	221.7	235.6	271.9	306.6	324.8
62.5°	198.3	213.1	250.3	285.8	303.1
65°	175.8	191.4	228.6	263.3	281.5
67.5°	154.2	170.6	207.0	240.8	259.0
70°	132.5	149.0	184.5	217.4	235.6
72.5°	111.7	128.2	162.8	192.3	206.1
75°	90.9	108.3	139.4	160.2	168.9
77.5°	71.0	88.3	115.2	129.0	138.6
80°	52.8	67.6	86.6	97.0	100.5
82.5°	36.4	48.5	60.6	63.2	65.0
85°	22.5	28.6	32.9	32.0	32.0
87.5°	10.4	11.3	9.5	6.9	4.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)