

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: P230876

Luminaire Tested: **22CZ-LD5-39SE-RDP-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230876
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25714)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-39SE-RDP-UNV-L930-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH RDP LENS
Light Source: (56) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2160.0 lumens
Efficiency: N/A
Efficacy: 61.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

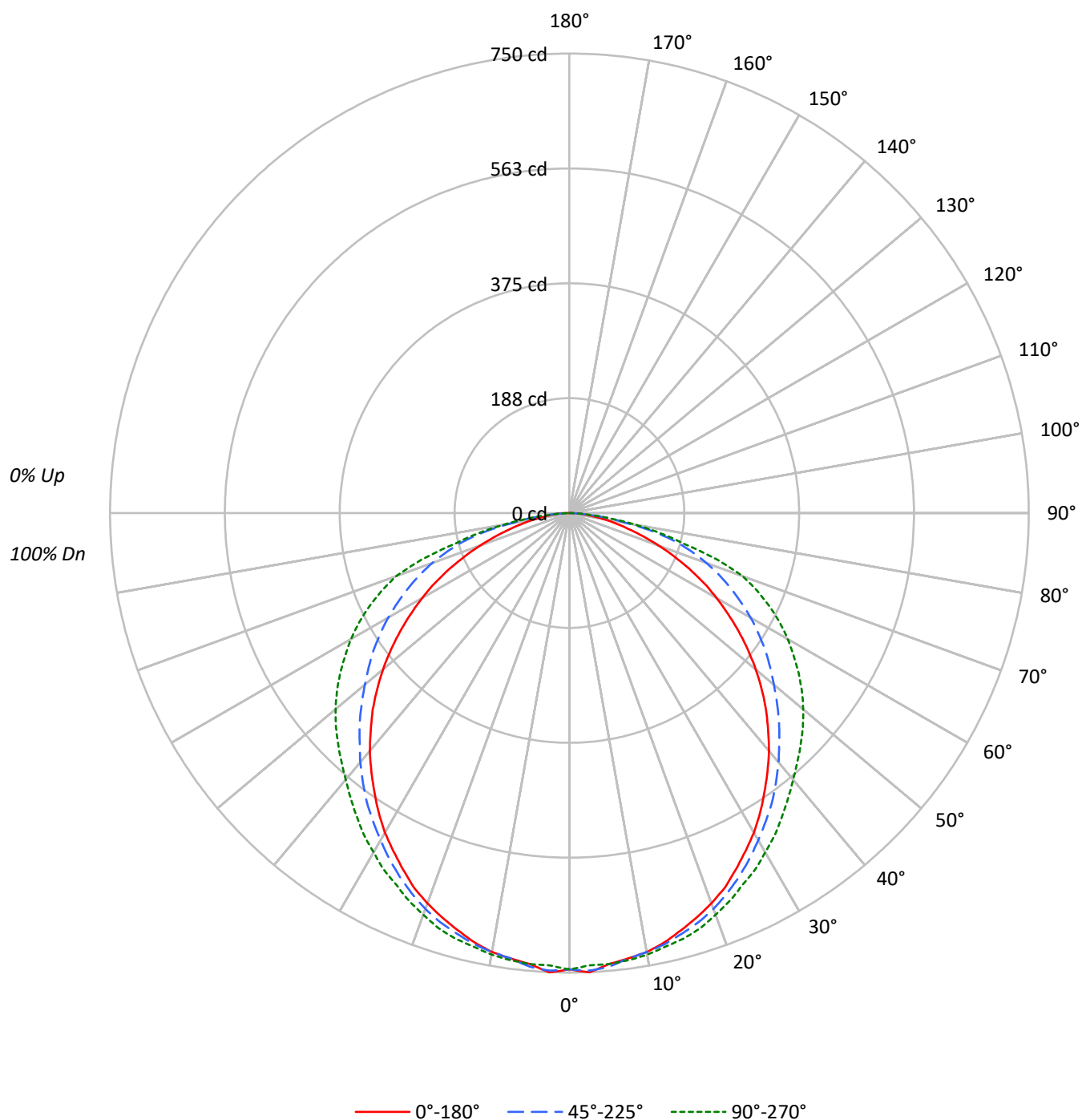
Input Watts (W): 34.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	81	76		84	79	74			81	77	73			78
3	89	79	70	64	87	77	69	63		74	67	62			71	66	61			69
4	82	69	60	54	79	68	60	53		66	58	52			63	57	52			61
5	75	62	53	46	73	61	52	46		59	51	45			57	50	45			55
6	69	56	47	40	67	55	46	40		53	45	40			51	44	39			50
7	64	50	42	35	62	50	41	35		48	40	35			47	40	35			45
8	60	46	37	31	58	45	37	31		44	37	31			43	36	31			42
9	56	42	34	28	54	42	34	28		40	33	28			39	33	28			38
10	52	39	31	26	51	38	31	26		37	30	25			36	30	25			36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2004	2004	2004
5°	1996	2008	1996
10°	1988	1988	2000
15°	1964	1979	2003
20°	1941	1969	1998
25°	1907	1945	1987
30°	1872	1916	1986
35°	1824	1895	1988
40°	1781	1866	1996
45°	1729	1842	2032
50°	1663	1824	2087
55°	1583	1830	2145
60°	1495	1839	2215
65°	1378	1850	2294
70°	1221	1871	2364
75°	1037	1865	2013
80°	860	1500	1677
85°	747	1010	966



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.4	3.3
10°-20°	200.7	9.3
20°-30°	301.9	14.0
30°-40°	361.8	16.8
40°-50°	377.3	17.5
50°-60°	351.3	16.3
60°-70°	285.3	13.2
70°-80°	171.9	8.0
80°-90°	39.4	1.8
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°	573.0	26.5
0°-40°	934.8	43.3
0°-60°	1663.4	77.0
0°-90°	2160.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2160.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	745	745	745	745	745	
5°	739	739	743	745	739	70
15°	705	708	710	715	719	199
25°	642	646	655	664	669	296
35°	555	562	577	594	605	348
45°	454	463	484	515	534	350
55°	338	352	390	433	457	302
65°	216	239	290	336	360	214
75°	100	132	179	191	194	108
85°	24	30	33	31	31	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	744.7	744.7	744.7	744.7	744.7
2.5°	750.4	749.0	747.5	743.3	739.0
5°	739.0	739.0	743.3	744.7	739.0
7.5°	733.3	733.3	733.3	739.0	736.1
10°	727.6	727.6	727.6	731.9	731.9
12.5°	717.6	719.1	720.5	721.9	724.8
15°	704.8	707.7	710.5	714.8	719.1
17.5°	692.0	694.9	700.5	704.8	710.5
20°	677.8	680.6	687.7	692.0	697.7
22.5°	662.1	663.5	672.1	677.8	684.9
25°	642.2	646.4	655.0	663.5	669.2
27.5°	622.2	626.5	636.5	647.9	656.4
30°	602.3	606.6	616.5	630.8	639.3
32.5°	579.5	585.2	596.6	613.7	623.7
35°	555.3	562.4	576.7	593.8	605.1
37.5°	531.1	538.2	553.9	575.2	586.6
40°	506.9	514.0	531.1	553.9	568.1
42.5°	479.8	488.4	506.9	534.0	551.0
45°	454.2	462.8	484.1	515.4	534.0
47.5°	425.7	435.7	459.9	495.5	516.9
50°	397.3	408.7	435.7	475.6	498.4
52.5°	367.4	380.2	412.9	454.2	478.4
55°	337.5	351.7	390.1	432.9	457.1
57.5°	307.6	323.2	365.9	410.1	434.3
60°	277.7	294.7	341.7	387.3	411.5
62.5°	247.8	266.3	316.1	361.7	387.3
65°	216.4	239.2	290.5	336.0	360.2
67.5°	185.1	212.2	264.8	309.0	331.8
70°	155.2	185.1	237.8	279.1	300.4
72.5°	126.7	158.1	209.3	244.9	253.4
75°	99.7	132.4	179.4	190.8	193.6
77.5°	76.9	106.8	142.4	145.2	152.4
80°	55.5	81.2	96.8	105.4	108.2
82.5°	38.4	55.5	64.1	65.5	66.9
85°	24.2	29.9	32.7	31.3	31.3
87.5°	12.8	11.4	10.0	7.1	5.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)