

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: P230833

Luminaire Tested: **22CZ-LD5-39SE-SQP-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230833
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25713)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-39SE-SQP-UNV-L935-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SQP LENS
Light Source: (56) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2356.0 lumens
Efficiency: N/A
Efficacy: 67.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.31 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

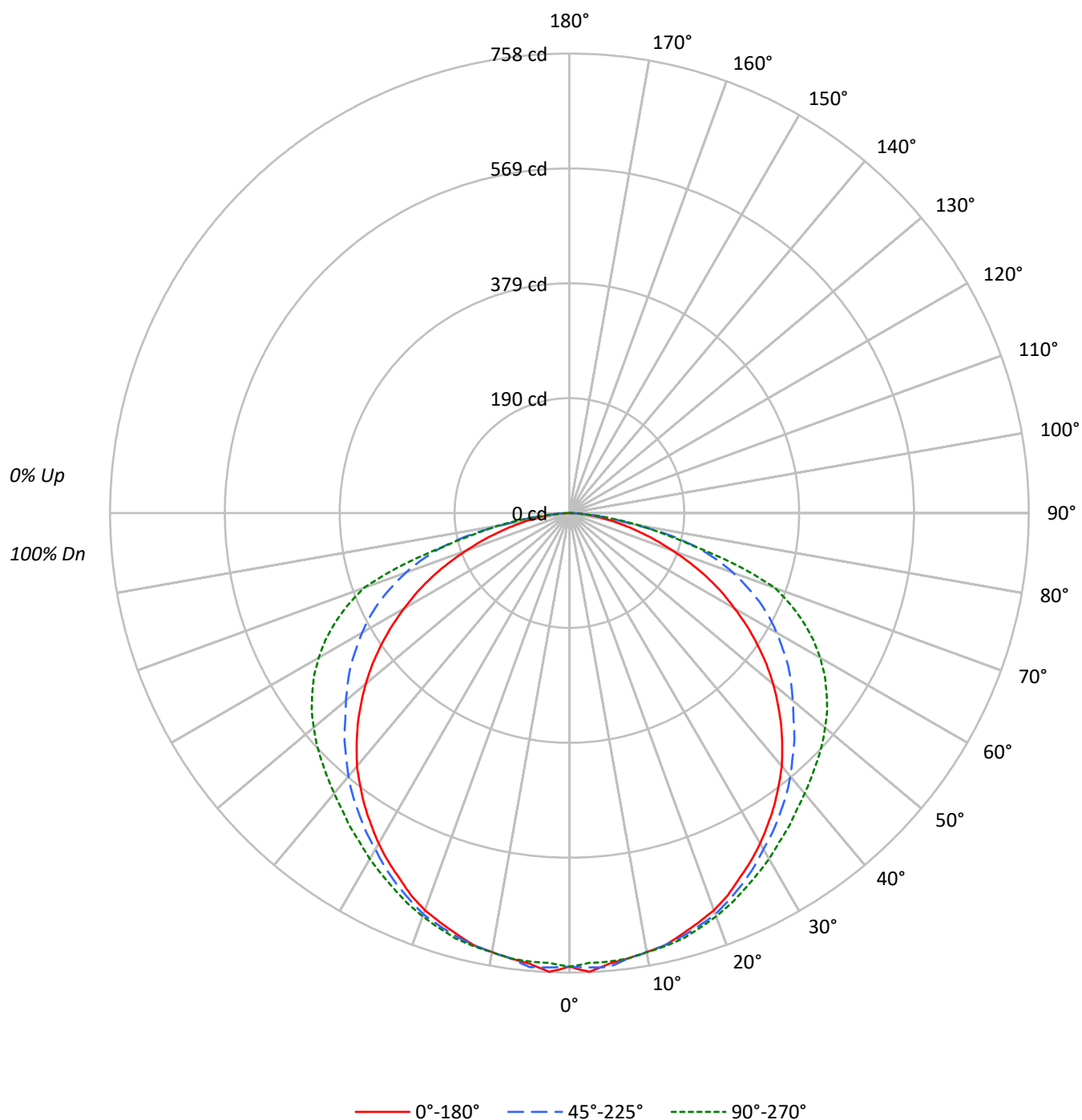
Input Watts (W): 34.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		0
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		100
1	108	103	99	95	105	101	97	93	97	93	90		93	90	87		83
2	98	89	82	76	95	87	81	75	84	78	73		80	76	71		68
3	89	78	69	62	86	76	68	62	73	66	61		70	64	59		56
4	81	68	59	52	79	67	58	52	64	57	51		62	56	50		47
5	74	61	52	45	72	60	51	44	58	50	44		56	49	43		41
6	68	55	45	39	66	54	45	39	52	44	38		50	43	38		35
7	63	49	40	34	62	49	40	34	47	39	34		45	39	33		31
8	59	45	36	30	57	44	36	30	43	35	30		42	35	30		28
9	55	41	33	27	54	41	33	27	39	32	27		38	32	27		25
10	51	38	30	24	50	37	30	24	36	29	24		35	29	24		22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2014	2014	2014
5°	2016	2031	2006
10°	2010	2010	2010
15°	2003	2013	2024
20°	1996	2017	2028
25°	1972	2004	2032
30°	1956	1990	2047
35°	1935	1989	2074
40°	1915	1992	2121
45°	1880	1998	2200
50°	1838	2015	2305
55°	1777	2069	2429
60°	1694	2127	2570
65°	1596	2202	2714
70°	1425	2260	2836
75°	1236	2263	2245
80°	1049	1672	1815
85°	905	1130	1016



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.0	3.0
10°-20°	204.0	8.7
20°-30°	311.0	13.2
30°-40°	380.5	16.1
40°-50°	409.4	17.4
50°-60°	396.5	16.8
60°-70°	335.9	14.3
70°-80°	203.0	8.6
80°-90°	44.6	1.9
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°	586.0	24.9
0°-40°	966.5	41.0
0°-60°	1772.4	75.2
0°-90°	2356.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2356.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	748	748	748	748	748	
5°	746	746	752	748	743	71
15°	719	721	723	724	726	203
25°	664	668	675	681	684	307
35°	589	593	606	622	631	368
45°	494	503	525	558	578	381
55°	379	395	441	492	518	338
65°	251	278	346	401	426	247
75°	119	161	218	221	216	128
85°	29	35	37	35	33	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	748.3	748.3	748.3	748.3	748.3
2.5°	757.5	755.6	750.2	746.5	742.8
5°	746.5	746.5	752.0	748.3	742.8
7.5°	741.0	741.0	741.0	750.2	741.0
10°	735.5	737.4	735.5	742.8	735.5
12.5°	730.0	730.0	730.0	731.9	731.9
15°	719.1	720.9	722.7	724.5	726.4
17.5°	708.1	709.9	713.6	715.4	717.2
20°	697.1	698.9	704.4	704.4	708.1
22.5°	682.5	682.5	689.8	691.6	697.1
25°	664.2	667.8	675.1	680.6	684.3
27.5°	647.7	651.4	658.7	666.0	671.5
30°	629.4	633.1	640.4	651.4	658.7
32.5°	609.3	612.9	623.9	636.7	644.0
35°	589.1	592.8	605.6	622.1	631.2
37.5°	567.2	572.7	587.3	605.6	616.6
40°	545.2	550.7	567.2	587.3	603.8
42.5°	519.6	526.9	545.2	572.7	591.0
45°	494.0	503.2	525.1	558.0	578.2
47.5°	466.6	475.7	501.3	543.4	565.4
50°	439.1	450.1	481.2	526.9	550.7
52.5°	409.8	420.8	461.1	510.5	536.1
55°	378.7	395.2	440.9	492.2	517.8
57.5°	347.6	365.9	417.2	472.1	499.5
60°	314.7	336.7	395.2	450.1	477.5
62.5°	283.6	307.4	371.4	426.3	453.8
65°	250.7	278.1	345.8	400.7	426.3
67.5°	215.9	250.7	316.5	369.6	395.2
70°	181.1	221.4	287.3	336.7	360.4
72.5°	150.0	192.1	254.3	296.4	296.4
75°	118.9	161.0	217.7	221.4	215.9
77.5°	91.5	131.7	170.2	155.5	159.2
80°	67.7	100.6	107.9	113.4	117.1
82.5°	45.7	67.7	69.5	73.2	73.2
85°	29.3	34.8	36.6	34.8	32.9
87.5°	12.8	14.6	11.0	7.3	5.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)