

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: P230831

Luminaire Tested: **22CZ-LD5-32SE-SQP-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230831
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-LD5-32SE-SQP-UNV-L950-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SQP LENS
Light Source: (56) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2124.0 lumens
Efficiency: N/A
Efficacy: 69.6 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

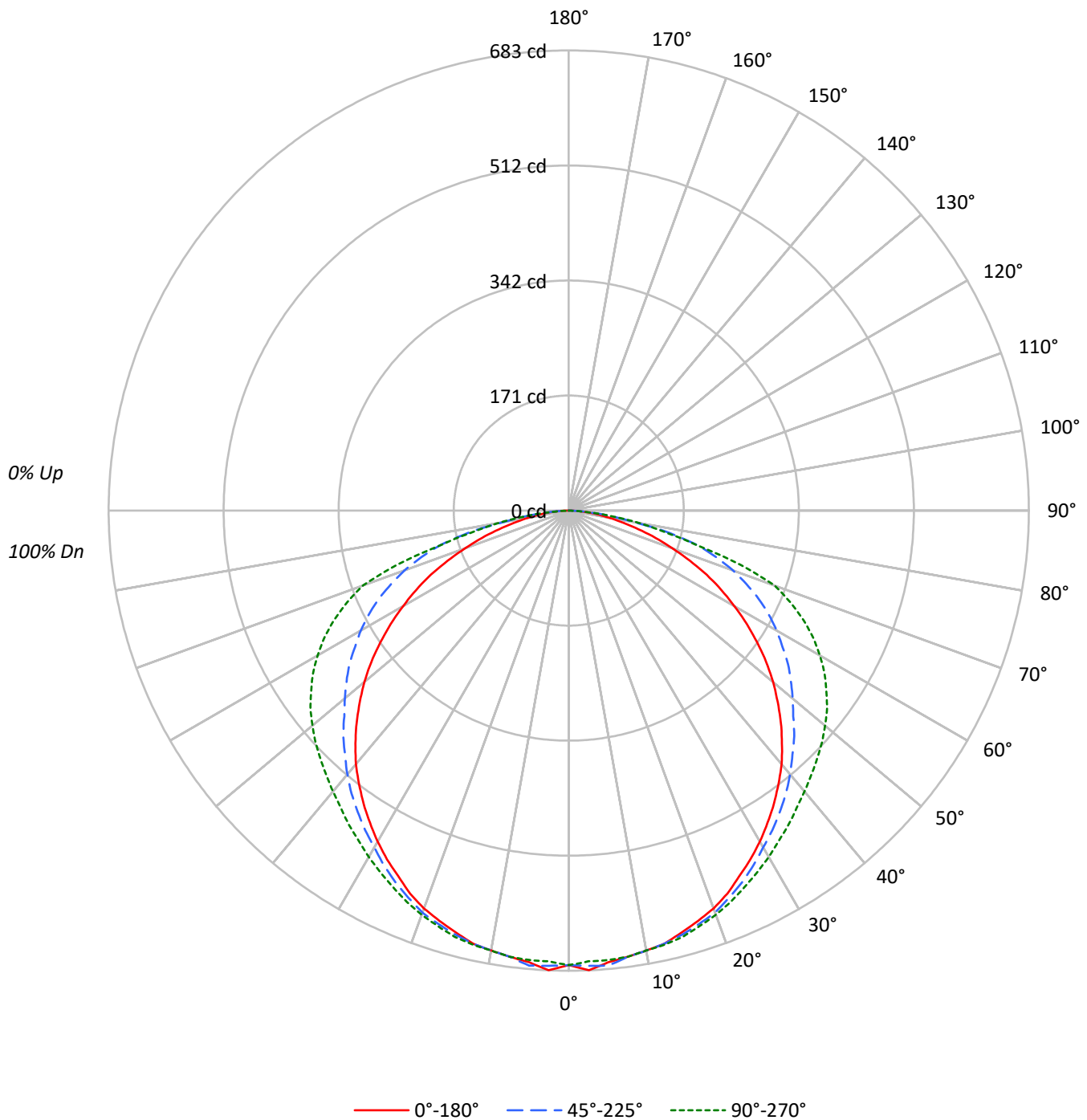
Input Watts (W): 30.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83		
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68		
3	89	78	69	62	86	76	68	62	73	66	61	70	64	59	68	63	58	56		
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47		
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41		
6	68	55	45	39	66	54	45	39	52	44	38	50	43	38	48	42	37	35		
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31		
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28		
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25		
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1815	1815	1815
5°	1818	1831	1809
10°	1812	1812	1812
15°	1806	1815	1824
20°	1800	1819	1828
25°	1778	1807	1832
30°	1763	1794	1845
35°	1745	1794	1870
40°	1727	1796	1912
45°	1695	1802	1983
50°	1657	1816	2079
55°	1602	1865	2190
60°	1527	1918	2317
65°	1439	1985	2447
70°	1285	2038	2556
75°	1115	2041	2023
80°	945	1508	1636
85°	815	1019	917



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.1	3.0
10°-20°	184.0	8.7
20°-30°	280.3	13.2
30°-40°	343.0	16.1
40°-50°	369.1	17.4
50°-60°	357.5	16.8
60°-70°	302.8	14.3
70°-80°	183.1	8.6
80°-90°	40.2	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°	528.3	24.9
0°-40°	871.3	41.0
0°-60°	1597.9	75.2
0°-90°	2124.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2124.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	675	675	675	675	675	
5°	673	673	678	675	670	64
15°	648	650	652	653	655	183
25°	599	602	609	614	617	276
35°	531	534	546	561	569	332
45°	445	454	473	503	521	343
55°	341	356	398	444	467	305
65°	226	251	312	361	384	223
75°	107	145	196	200	195	115
85°	26	31	33	31	30	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	674.6	674.6	674.6	674.6	674.6
2.5°	682.9	681.2	676.3	673.0	669.7
5°	673.0	673.0	677.9	674.6	669.7
7.5°	668.0	668.0	668.0	676.3	668.0
10°	663.1	664.7	663.1	669.7	663.1
12.5°	658.1	658.1	658.1	659.8	659.8
15°	648.2	649.9	651.5	653.2	654.8
17.5°	638.4	640.0	643.3	644.9	646.6
20°	628.5	630.1	635.1	635.1	638.4
22.5°	615.3	615.3	621.9	623.5	628.5
25°	598.8	602.1	608.7	613.6	616.9
27.5°	583.9	587.2	593.8	600.4	605.4
30°	567.4	570.7	577.3	587.2	593.8
32.5°	549.3	552.6	562.5	574.0	580.6
35°	531.1	534.4	546.0	560.8	569.1
37.5°	511.3	516.3	529.5	546.0	555.9
40°	491.5	496.5	511.3	529.5	544.3
42.5°	468.5	475.1	491.5	516.3	532.8
45°	445.4	453.6	473.4	503.1	521.2
47.5°	420.6	428.9	452.0	489.9	509.7
50°	395.9	405.8	433.8	475.1	496.5
52.5°	369.5	379.4	415.7	460.2	483.3
55°	341.4	356.3	397.5	443.7	466.8
57.5°	313.4	329.9	376.1	425.6	450.3
60°	283.7	303.5	356.3	405.8	430.5
62.5°	255.7	277.1	334.8	384.3	409.1
65°	226.0	250.7	311.8	361.2	384.3
67.5°	194.6	226.0	285.4	333.2	356.3
70°	163.3	199.6	259.0	303.5	324.9
72.5°	135.3	173.2	229.3	267.2	267.2
75°	107.2	145.2	196.3	199.6	194.6
77.5°	82.5	118.8	153.4	140.2	143.5
80°	61.0	90.7	97.3	102.3	105.6
82.5°	41.2	61.0	62.7	66.0	66.0
85°	26.4	31.3	33.0	31.3	29.7
87.5°	11.5	13.2	9.9	6.6	4.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)