

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: P230830

Luminaire Tested: **22CZ-LD5-32SE-SQP-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230830
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-L940-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SQP LENS
Light Source: (56) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1952.0 lumens
Efficiency: N/A
Efficacy: 64.0 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

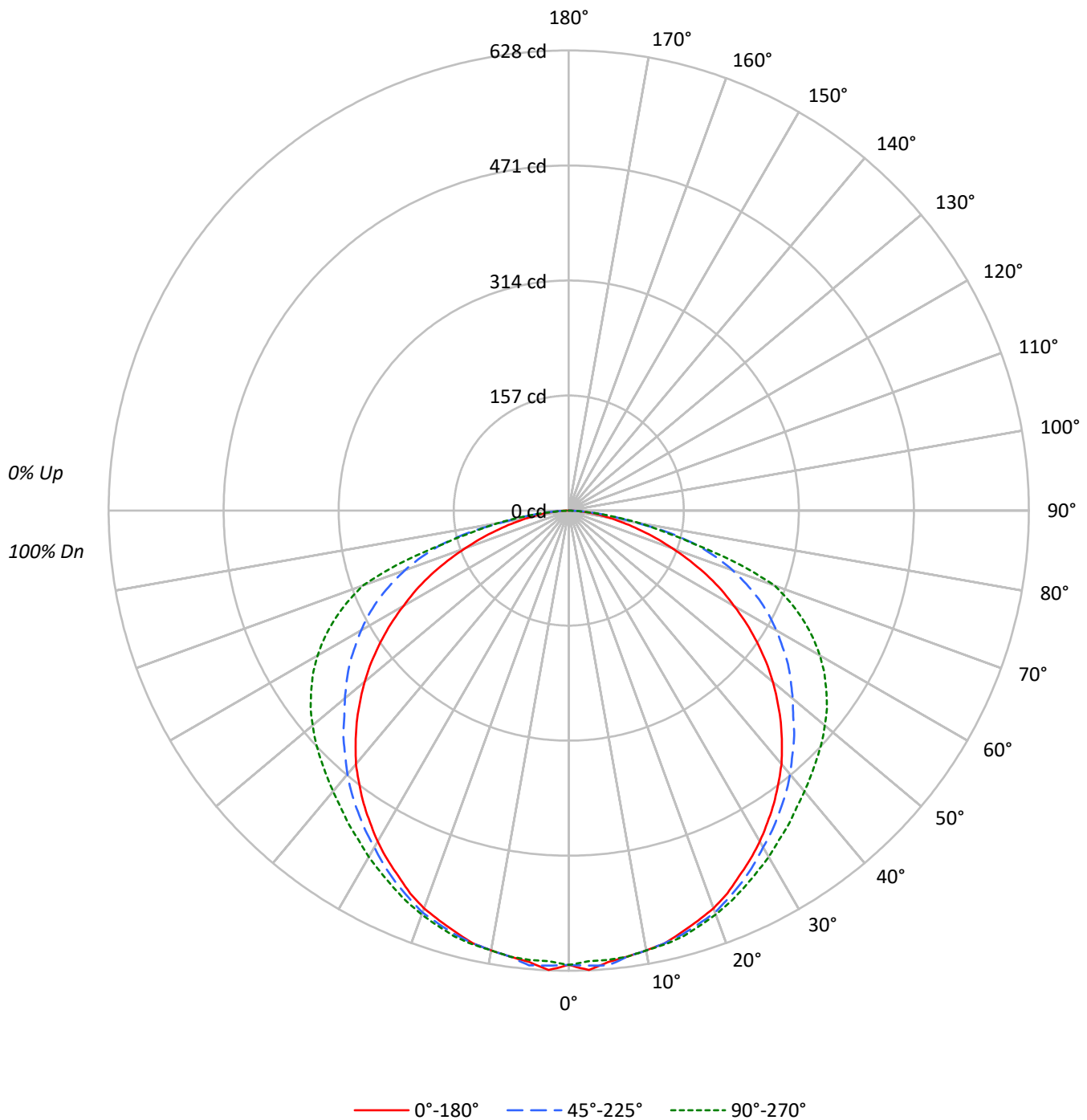
Input Watts (W): 30.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	108	103	99	95	105	101	97	93		97	93	90		93	90	87		89	87	85
2	98	89	82	76	95	87	81	75		84	78	73		80	76	71		77	73	70
3	89	78	69	62	86	76	68	62		73	66	61		70	64	59		68	63	58
4	81	68	59	52	79	67	58	52		64	57	51		62	56	50		60	54	50
5	74	61	52	45	72	60	51	44		58	50	44		56	49	43		54	48	43
6	68	55	45	39	66	54	45	39		52	44	38		50	43	38		48	42	37
7	63	49	40	34	62	49	40	34		47	39	34		45	39	33		44	38	33
8	59	45	36	30	57	44	36	30		43	35	30		42	35	30		40	34	29
9	55	41	33	27	54	41	33	27		39	32	27		38	32	27		37	31	27
10	51	38	30	24	50	37	30	24		36	29	24		35	29	24		35	28	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1668	1668	1668
5°	1671	1683	1663
10°	1665	1665	1665
15°	1660	1668	1677
20°	1654	1671	1680
25°	1634	1661	1684
30°	1620	1649	1696
35°	1603	1648	1718
40°	1587	1651	1757
45°	1558	1656	1823
50°	1523	1669	1910
55°	1472	1714	2013
60°	1403	1762	2130
65°	1323	1824	2249
70°	1181	1873	2349
75°	1024	1876	1860
80°	869	1385	1503
85°	750	936	843



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.9	3.0
10°-20°	169.1	8.7
20°-30°	257.6	13.2
30°-40°	315.2	16.1
40°-50°	339.2	17.4
50°-60°	328.5	16.8
60°-70°	278.3	14.3
70°-80°	168.2	8.6
80°-90°	37.0	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°	485.6	24.9
0°-40°	800.8	41.0
0°-60°	1468.5	75.2
0°-90°	1952.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1952.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	620	620	620	620	620	
5°	618	618	623	620	616	59
15°	596	597	599	600	602	168
25°	550	553	559	564	567	254
35°	488	491	502	515	523	305
45°	409	417	435	462	479	315
55°	314	327	365	408	429	280
65°	208	230	286	332	353	205
75°	98	133	180	183	179	106
85°	24	29	30	29	27	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	620.0	620.0	620.0	620.0	620.0
2.5°	627.6	626.1	621.5	618.5	615.5
5°	618.5	618.5	623.0	620.0	615.5
7.5°	613.9	613.9	613.9	621.5	613.9
10°	609.4	610.9	609.4	615.5	609.4
12.5°	604.8	604.8	604.8	606.4	606.4
15°	595.8	597.3	598.8	600.3	601.8
17.5°	586.7	588.2	591.2	592.7	594.2
20°	577.6	579.1	583.6	583.6	586.7
22.5°	565.4	565.4	571.5	573.0	577.6
25°	550.3	553.3	559.4	563.9	567.0
27.5°	536.6	539.7	545.7	551.8	556.3
30°	521.5	524.5	530.6	539.7	545.7
32.5°	504.8	507.8	516.9	527.5	533.6
35°	488.1	491.2	501.8	515.4	523.0
37.5°	469.9	474.5	486.6	501.8	510.9
40°	451.7	456.3	469.9	486.6	500.3
42.5°	430.5	436.6	451.7	474.5	489.6
45°	409.3	416.9	435.1	462.4	479.0
47.5°	386.6	394.1	415.4	450.2	468.4
50°	363.8	372.9	398.7	436.6	456.3
52.5°	339.6	348.7	382.0	422.9	444.2
55°	313.8	327.4	365.3	407.8	429.0
57.5°	288.0	303.2	345.6	391.1	413.8
60°	260.7	278.9	327.4	372.9	395.7
62.5°	235.0	254.7	307.7	353.2	375.9
65°	207.7	230.4	286.5	332.0	353.2
67.5°	178.9	207.7	262.3	306.2	327.4
70°	150.1	183.4	238.0	278.9	298.6
72.5°	124.3	159.2	210.7	245.6	245.6
75°	98.5	133.4	180.4	183.4	178.9
77.5°	75.8	109.1	141.0	128.9	131.9
80°	56.1	83.4	89.4	94.0	97.0
82.5°	37.9	56.1	57.6	60.6	60.6
85°	24.3	28.8	30.3	28.8	27.3
87.5°	10.6	12.1	9.1	6.1	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)