

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: P263113

Luminaire Tested: **24CZ-LD5-70-SQP-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P263113
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25695)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-70-SQP-UNV-L83050-W2A1-U-3500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS
Light Source: (336) 80 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4668.0 lumens
Efficiency: N/A
Efficacy: 87.0 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.42
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

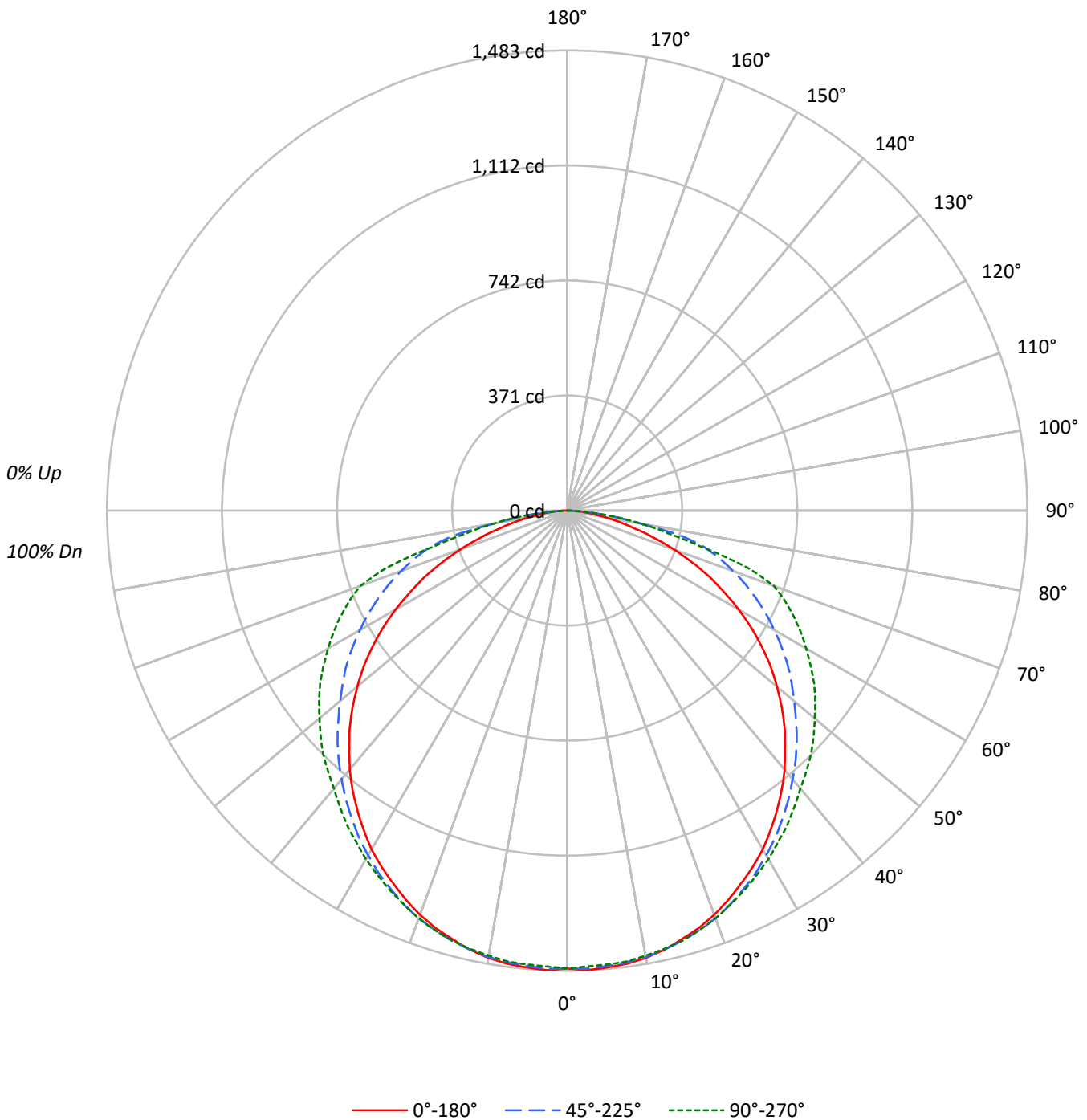
Input Watts (W): 53.661
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RW	70	50	30	10	70	50	30	10	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	102	102	102	100
1	108	103	98	94	105	101	97	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	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	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	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°	1985	1985	1985
5°	1996	1990	1983
10°	2000	1996	1990
15°	1992	1998	1998
20°	1985	2002	2002
25°	1969	1997	2005
30°	1959	1993	2015
35°	1937	1988	2032
40°	1914	1986	2054
45°	1886	1991	2115
50°	1847	1999	2180
55°	1799	2036	2279
60°	1720	2076	2394
65°	1612	2142	2564
70°	1442	2238	2789
75°	1191	2394	2307
80°	972	1850	1868
85°	781	1229	1153



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.1	3.0
10°-20°	404.4	8.7
20°-30°	618.1	13.2
30°-40°	755.9	16.2
40°-50°	808.9	17.3
50°-60°	774.5	16.6
60°-70°	655.2	14.0
70°-80°	415.3	8.9
80°-90°	95.5	2.0
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°	1162.6	24.9
0°-40°	1918.6	41.1
0°-60°	3501.9	75.0
0°-90°	4668.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4668.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1476	1476	1476	1476	1476	
5°	1478	1471	1473	1471	1468	141
15°	1430	1427	1435	1435	1435	404
25°	1326	1326	1345	1350	1350	612
35°	1179	1186	1210	1227	1237	738
45°	991	1008	1046	1090	1112	763
55°	767	791	868	940	972	684
65°	506	555	673	764	805	499
75°	229	323	460	458	444	249
85°	51	77	80	72	75	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1475.6	1475.6	1475.6	1475.6	1475.6
2.5°	1482.9	1475.6	1478.1	1475.6	1470.8
5°	1478.1	1470.8	1473.2	1470.8	1468.4
7.5°	1473.2	1466.0	1468.4	1466.0	1466.0
10°	1463.6	1456.4	1461.2	1458.8	1456.4
12.5°	1449.1	1444.3	1449.1	1446.7	1446.7
15°	1429.8	1427.4	1434.7	1434.7	1434.7
17.5°	1410.5	1408.1	1417.8	1417.8	1417.8
20°	1386.4	1384.0	1398.5	1398.5	1398.5
22.5°	1357.5	1355.1	1374.4	1374.4	1374.4
25°	1326.1	1326.1	1345.4	1350.3	1350.3
27.5°	1294.8	1294.8	1316.5	1323.7	1323.7
30°	1261.0	1261.0	1282.7	1292.4	1297.2
32.5°	1220.1	1224.9	1249.0	1261.0	1265.9
35°	1179.1	1186.3	1210.4	1227.3	1236.9
37.5°	1135.7	1142.9	1171.8	1191.1	1203.2
40°	1089.9	1099.5	1130.8	1155.0	1169.4
42.5°	1039.2	1053.7	1089.9	1121.2	1140.5
45°	991.0	1007.9	1046.5	1089.9	1111.6
47.5°	937.9	957.2	1000.6	1056.1	1077.8
50°	882.5	901.8	954.8	1017.5	1041.6
52.5°	827.0	848.7	911.4	978.9	1007.9
55°	766.8	790.9	868.0	940.4	971.7
57.5°	704.1	733.0	819.8	897.0	930.7
60°	639.0	675.1	771.6	853.6	889.7
62.5°	571.4	614.9	723.4	810.2	848.7
65°	506.3	554.6	672.7	764.3	805.3
67.5°	436.4	496.7	622.1	720.9	759.5
70°	366.5	436.4	569.0	670.3	708.9
72.5°	296.6	381.0	516.0	607.6	607.6
75°	229.1	323.1	460.5	458.1	443.7
77.5°	173.6	270.1	378.6	323.1	325.5
80°	125.4	217.0	238.7	238.7	241.1
82.5°	84.4	166.4	154.3	151.9	156.7
85°	50.6	77.2	79.6	72.3	74.7
87.5°	24.1	26.5	21.7	14.5	14.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)