

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: P261038

Luminaire Tested: **24CZ-LD5-45SE-S-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261038
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-45SE-S-UNV-L83050-W2A1-U-3500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4623.0 lumens
Efficiency: N/A
Efficacy: 132.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

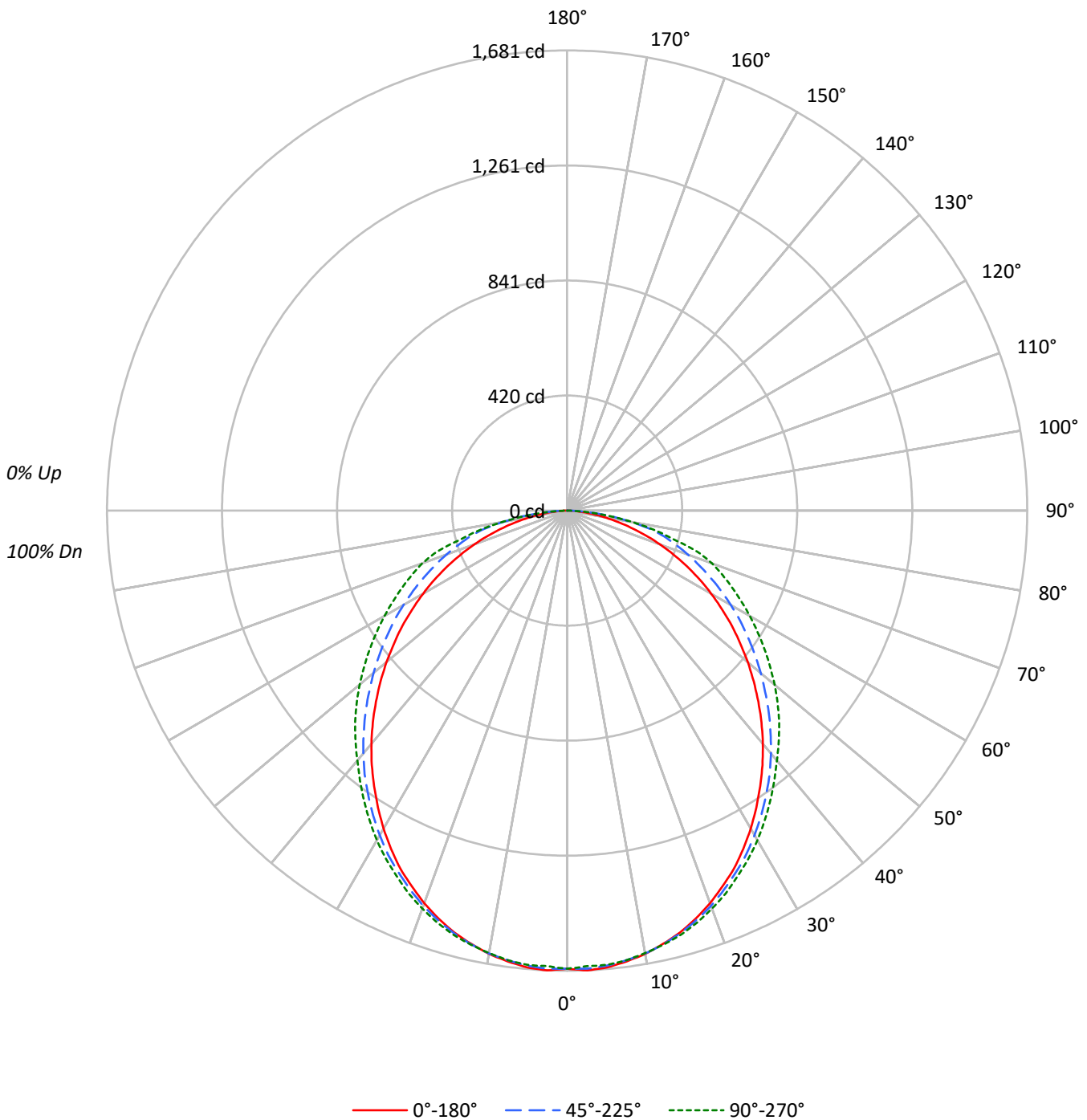
Input Watts (W): 34.968
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2252	2252	2252
5°	2262	2254	2250
10°	2247	2244	2242
15°	2222	2226	2235
20°	2185	2200	2216
25°	2142	2165	2188
30°	2084	2127	2160
35°	2019	2082	2125
40°	1953	2034	2094
45°	1879	1982	2084
50°	1803	1932	2070
55°	1725	1891	2064
60°	1635	1859	2074
65°	1538	1836	2116
70°	1416	1846	2215
75°	1255	1911	2063
80°	1049	1812	1860
85°	784	1448	1329



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.2	3.4
10°-20°	450.0	9.7
20°-30°	670.6	14.5
30°-40°	789.5	17.1
40°-50°	802.3	17.4
50°-60°	721.3	15.6
60°-70°	569.8	12.3
70°-80°	361.5	7.8
80°-90°	99.8	2.2
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°	1278.9	27.7
0°-40°	2068.3	44.7
0°-60°	3591.9	77.7
0°-90°	4623.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4623.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1674	1674	1674	1674	1674	
5°	1675	1661	1669	1666	1666	159
15°	1595	1588	1598	1603	1604	449
25°	1443	1441	1458	1468	1474	663
35°	1229	1237	1268	1281	1294	769
45°	988	1001	1041	1072	1095	762
55°	735	754	806	858	880	657
65°	483	508	577	640	664	478
75°	242	283	368	400	397	257
85°	51	88	94	86	86	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1673.6	1673.6	1673.6	1673.6	1673.6
2.5°	1681.3	1669.0	1675.1	1672.1	1665.9
5°	1675.1	1661.3	1669.0	1665.9	1665.9
7.5°	1661.3	1650.5	1656.7	1655.2	1656.7
10°	1644.4	1633.6	1642.8	1642.8	1641.3
12.5°	1621.3	1612.1	1622.8	1622.8	1624.4
15°	1595.2	1587.5	1598.2	1602.9	1604.4
17.5°	1562.9	1555.2	1569.0	1573.6	1578.2
20°	1525.9	1522.9	1536.7	1541.3	1547.5
22.5°	1484.4	1484.4	1498.3	1504.4	1513.6
25°	1442.9	1441.3	1458.3	1467.5	1473.6
27.5°	1393.7	1395.2	1416.7	1426.0	1433.6
30°	1341.4	1344.4	1369.0	1379.8	1390.6
32.5°	1286.0	1292.1	1319.8	1332.1	1342.9
35°	1229.1	1236.7	1267.5	1281.4	1293.7
37.5°	1172.1	1182.9	1215.2	1229.1	1242.9
40°	1112.2	1121.4	1158.3	1175.2	1192.1
42.5°	1050.6	1062.9	1099.8	1124.5	1144.5
45°	987.6	1001.4	1041.4	1072.2	1095.2
47.5°	924.5	942.9	981.4	1022.9	1042.9
50°	861.4	879.9	922.9	969.1	989.1
52.5°	796.8	815.3	864.5	912.2	933.7
55°	735.3	753.7	806.0	858.3	879.9
57.5°	670.7	690.7	749.1	803.0	824.5
60°	607.6	627.6	690.7	747.6	770.7
62.5°	546.1	567.6	633.8	693.7	716.8
65°	483.0	507.6	576.8	639.9	664.5
67.5°	421.5	449.2	521.5	587.6	613.8
70°	359.9	392.3	469.2	536.8	563.0
72.5°	300.0	335.3	416.9	484.5	498.4
75°	241.5	283.0	367.6	399.9	396.9
77.5°	186.1	232.3	312.3	318.4	327.6
80°	135.4	186.1	233.8	246.1	240.0
82.5°	89.2	140.0	167.7	161.5	160.0
85°	50.8	87.7	93.8	86.1	86.1
87.5°	21.5	35.4	30.8	23.1	21.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)