

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: P261153

Luminaire Tested: **24CZ-LD5-45-S-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261153
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-LD5-45-S-UNV-L82765-W2A1-U-4500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED AT 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4647.0 lumens
Efficiency: N/A
Efficacy: 145.3 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

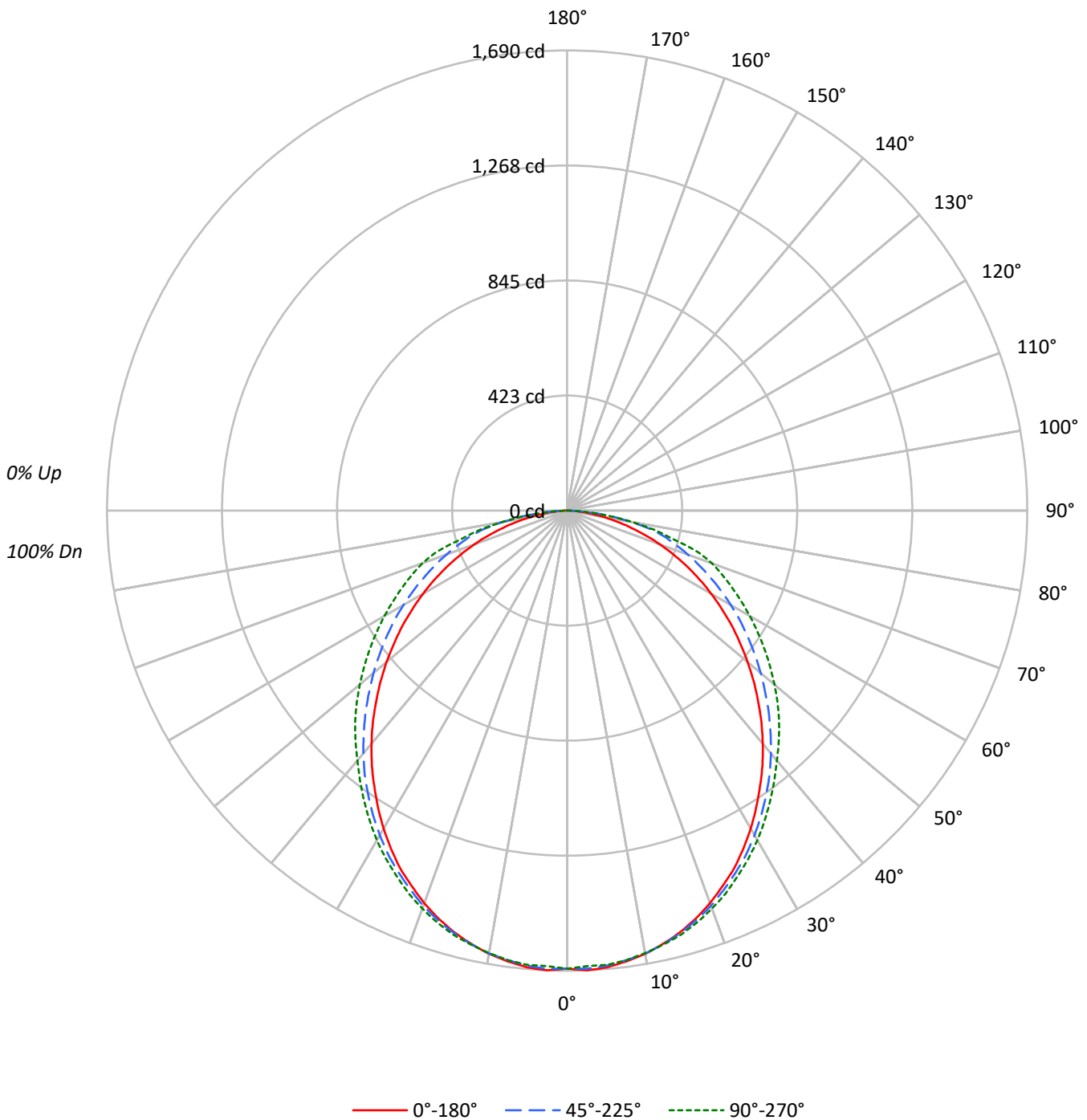
Input Watts (W): 31.992
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2264	2264	2264
5°	2274	2266	2262
10°	2258	2256	2254
15°	2233	2238	2246
20°	2196	2212	2227
25°	2153	2176	2199
30°	2095	2138	2172
35°	2029	2093	2136
40°	1963	2045	2105
45°	1889	1992	2095
50°	1813	1942	2081
55°	1734	1901	2075
60°	1644	1868	2085
65°	1546	1846	2127
70°	1423	1855	2226
75°	1262	1921	2074
80°	1055	1821	1869
85°	787	1456	1337



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.1	3.4
10°-20°	452.4	9.7
20°-30°	674.1	14.5
30°-40°	793.5	17.1
40°-50°	806.4	17.4
50°-60°	725.0	15.6
60°-70°	572.8	12.3
70°-80°	363.4	7.8
80°-90°	100.3	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°	1285.5	27.7
0°-40°	2079.1	44.7
0°-60°	3610.5	77.7
0°-90°	4647.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4647.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1682	1682	1682	1682	1682	
5°	1684	1670	1678	1675	1675	160
15°	1603	1596	1606	1611	1613	452
25°	1450	1449	1466	1475	1481	667
35°	1235	1243	1274	1288	1300	773
45°	993	1007	1047	1078	1101	766
55°	739	758	810	863	884	660
65°	486	510	580	643	668	481
75°	243	284	370	402	399	258
85°	51	88	94	87	87	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1682.3	1682.3	1682.3	1682.3	1682.3
2.5°	1690.0	1677.7	1683.8	1680.8	1674.6
5°	1683.8	1669.9	1677.7	1674.6	1674.6
7.5°	1669.9	1659.1	1665.3	1663.7	1665.3
10°	1652.9	1642.1	1651.4	1651.4	1649.8
12.5°	1629.7	1620.5	1631.3	1631.3	1632.8
15°	1603.4	1595.7	1606.5	1611.2	1612.7
17.5°	1571.0	1563.2	1577.2	1581.8	1586.4
20°	1533.9	1530.8	1544.7	1549.3	1555.5
22.5°	1492.1	1492.1	1506.0	1512.2	1521.5
25°	1450.4	1448.8	1465.8	1475.1	1481.3
27.5°	1400.9	1402.4	1424.1	1433.4	1441.1
30°	1348.3	1351.4	1376.1	1387.0	1397.8
32.5°	1292.6	1298.8	1326.7	1339.0	1349.9
35°	1235.4	1243.2	1274.1	1288.0	1300.4
37.5°	1178.2	1189.1	1221.5	1235.4	1249.4
40°	1117.9	1127.2	1164.3	1181.3	1198.3
42.5°	1056.1	1068.4	1105.6	1130.3	1150.4
45°	992.7	1006.6	1046.8	1077.7	1100.9
47.5°	929.3	947.8	986.5	1028.2	1048.3
50°	865.9	884.4	927.7	974.1	994.2
52.5°	800.9	819.5	869.0	916.9	938.6
55°	739.1	757.7	810.2	862.8	884.4
57.5°	674.2	694.3	753.0	807.1	828.8
60°	610.8	630.9	694.3	751.5	774.7
62.5°	548.9	570.6	637.0	697.4	720.5
65°	485.5	510.3	579.8	643.2	668.0
67.5°	423.7	451.5	524.2	590.7	616.9
70°	361.8	394.3	471.6	539.6	565.9
72.5°	301.5	337.1	419.0	487.1	501.0
75°	242.8	284.5	369.5	402.0	398.9
77.5°	187.1	233.5	313.9	320.1	329.3
80°	136.1	187.1	235.0	247.4	241.2
82.5°	89.7	140.7	168.5	162.4	160.8
85°	51.0	88.1	94.3	86.6	86.6
87.5°	21.6	35.6	30.9	23.2	21.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)