

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: P261152

Luminaire Tested: **24CZ-LD5-45-S-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261152
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-4000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4567.0 lumens
Efficiency: N/A
Efficacy: 143.6 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

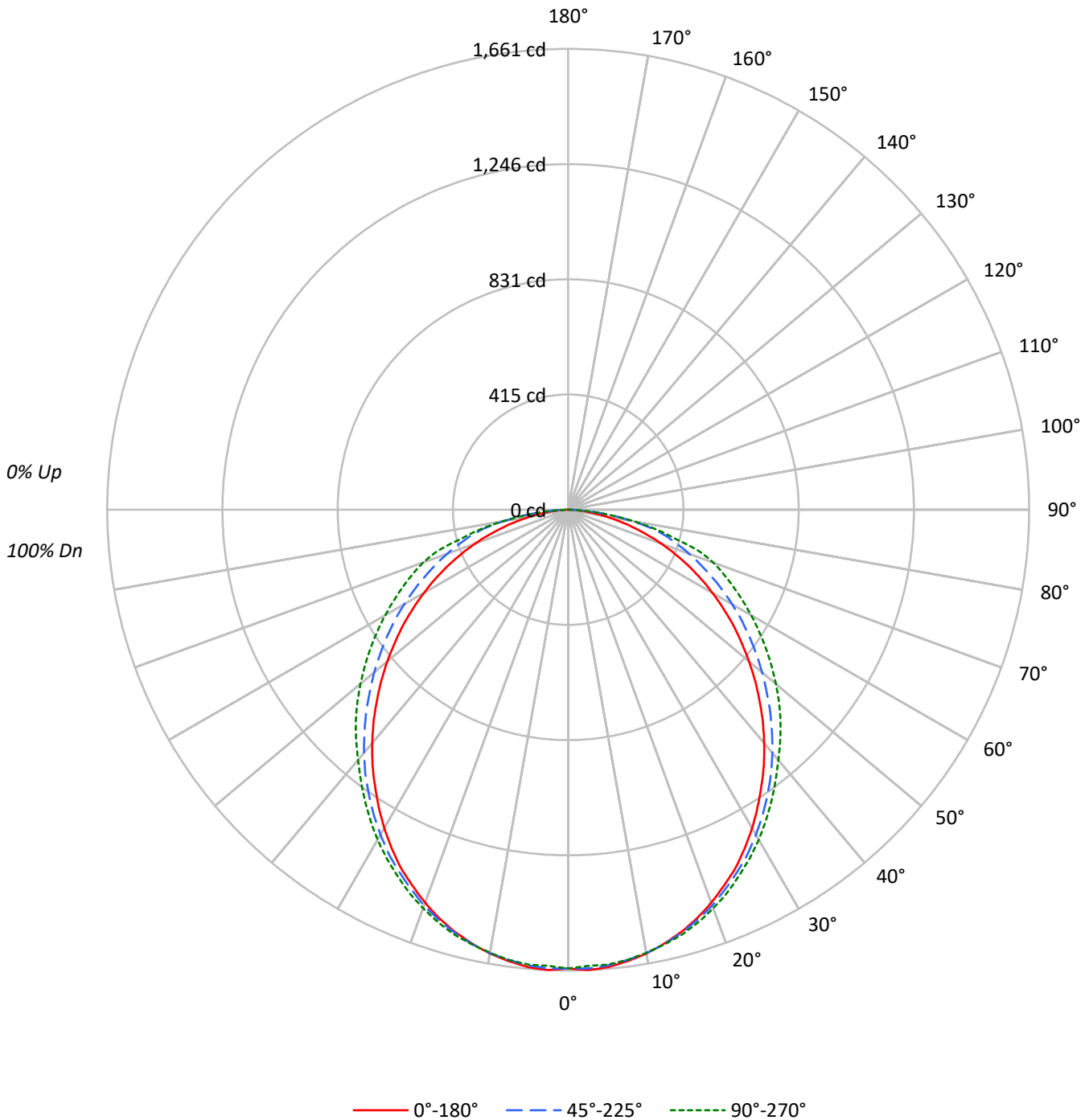
Input Watts (W): 31.806
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2224	2224	2224
5°	2235	2227	2223
10°	2219	2217	2215
15°	2195	2199	2208
20°	2158	2174	2189
25°	2116	2139	2161
30°	2059	2101	2134
35°	1994	2057	2099
40°	1930	2010	2069
45°	1856	1958	2059
50°	1781	1909	2045
55°	1704	1868	2039
60°	1615	1836	2049
65°	1519	1814	2090
70°	1399	1823	2188
75°	1240	1888	2038
80°	1036	1790	1837
85°	773	1431	1314



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.3	3.4
10°-20°	444.6	9.7
20°-30°	662.5	14.5
30°-40°	779.9	17.1
40°-50°	792.5	17.4
50°-60°	712.5	15.6
60°-70°	562.9	12.3
70°-80°	357.1	7.8
80°-90°	98.6	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°	1263.4	27.7
0°-40°	2043.3	44.7
0°-60°	3548.4	77.7
0°-90°	4567.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4567.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1653	1653	1653	1653	1653	
5°	1655	1641	1649	1646	1646	157
15°	1576	1568	1579	1583	1585	444
25°	1425	1424	1441	1450	1456	655
35°	1214	1222	1252	1266	1278	760
45°	976	989	1029	1059	1082	753
55°	726	745	796	848	869	649
65°	477	502	570	632	656	473
75°	239	280	363	395	392	254
85°	50	87	93	85	85	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1653.3	1653.3	1653.3	1653.3	1653.3
2.5°	1660.9	1648.8	1654.9	1651.8	1645.7
5°	1654.9	1641.2	1648.8	1645.7	1645.7
7.5°	1641.2	1630.5	1636.6	1635.1	1636.6
10°	1624.5	1613.8	1622.9	1622.9	1621.4
12.5°	1601.7	1592.6	1603.2	1603.2	1604.7
15°	1575.8	1568.2	1578.9	1583.4	1585.0
17.5°	1543.9	1536.3	1550.0	1554.6	1559.1
20°	1507.5	1504.4	1518.1	1522.7	1528.7
22.5°	1466.4	1466.4	1480.1	1486.2	1495.3
25°	1425.4	1423.9	1440.6	1449.7	1455.8
27.5°	1376.8	1378.3	1399.6	1408.7	1416.3
30°	1325.1	1328.1	1352.5	1363.1	1373.7
32.5°	1270.4	1276.5	1303.8	1316.0	1326.6
35°	1214.2	1221.8	1252.2	1265.8	1278.0
37.5°	1157.9	1168.6	1200.5	1214.2	1227.8
40°	1098.7	1107.8	1144.3	1161.0	1177.7
42.5°	1037.9	1050.1	1086.5	1110.8	1130.6
45°	975.6	989.3	1028.8	1059.2	1082.0
47.5°	913.3	931.5	969.5	1010.5	1030.3
50°	851.0	869.2	911.8	957.4	977.1
52.5°	787.2	805.4	854.0	901.1	922.4
55°	726.4	744.6	796.3	847.9	869.2
57.5°	662.6	682.3	740.1	793.2	814.5
60°	600.2	620.0	682.3	738.5	761.3
62.5°	539.5	560.7	626.1	685.3	708.1
65°	477.2	501.5	569.9	632.2	656.5
67.5°	416.4	443.7	515.1	580.5	606.3
70°	355.6	387.5	463.5	530.3	556.2
72.5°	296.3	331.3	411.8	478.7	492.4
75°	238.6	279.6	363.2	395.1	392.1
77.5°	183.9	229.5	308.5	314.6	323.7
80°	133.7	183.9	231.0	243.1	237.1
82.5°	88.1	138.3	165.6	159.6	158.0
85°	50.1	86.6	92.7	85.1	85.1
87.5°	21.3	35.0	30.4	22.8	21.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)