

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: P261381

Luminaire Tested: **24CZ-LD5-45SE-S-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261381
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-L92765-W2A1-U-5700K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED AT 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4357.0 lumens
Efficiency: N/A
Efficacy: 121.1 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

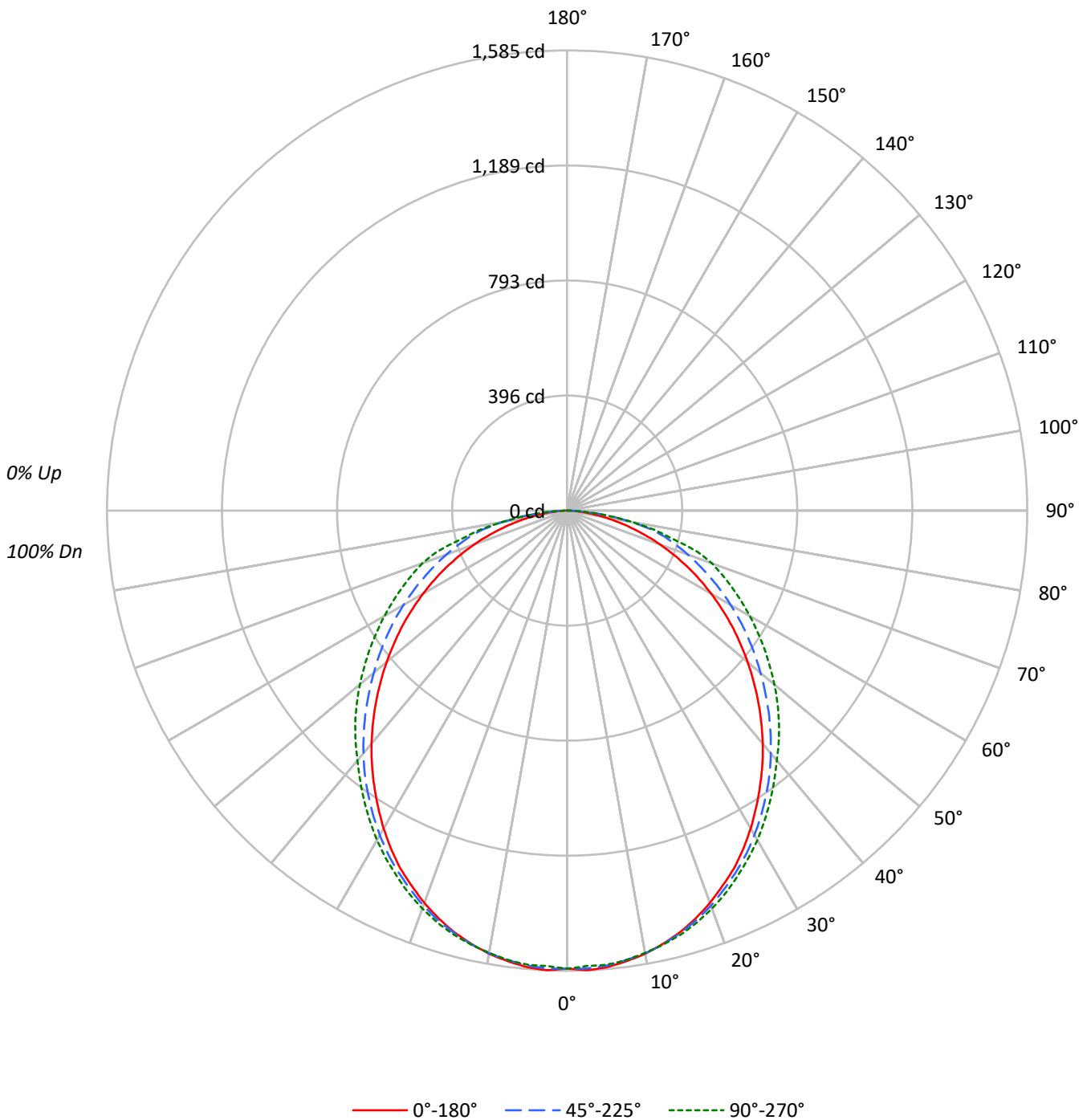
Input Watts (W): 35.991
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2122	2122	2122
5°	2132	2125	2121
10°	2117	2115	2113
15°	2094	2098	2106
20°	2059	2074	2088
25°	2019	2040	2062
30°	1964	2005	2036
35°	1903	1962	2003
40°	1841	1917	1973
45°	1771	1868	1964
50°	1699	1821	1951
55°	1626	1782	1945
60°	1541	1752	1954
65°	1449	1731	1994
70°	1334	1740	2087
75°	1183	1801	1944
80°	989	1708	1753
85°	738	1365	1254



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.1	3.4
10°-20°	424.1	9.7
20°-30°	632.1	14.5
30°-40°	744.0	17.1
40°-50°	756.1	17.4
50°-60°	679.8	15.6
60°-70°	537.0	12.3
70°-80°	340.7	7.8
80°-90°	94.0	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°	1205.3	27.7
0°-40°	1949.3	44.7
0°-60°	3385.2	77.7
0°-90°	4357.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4357.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1577	1577	1577	1577	1577	
5°	1579	1566	1573	1570	1570	150
15°	1503	1496	1506	1511	1512	423
25°	1360	1358	1374	1383	1389	625
35°	1158	1166	1195	1208	1219	725
45°	931	944	982	1010	1032	718
55°	693	710	760	809	829	619
65°	455	478	544	603	626	451
75°	228	267	346	377	374	242
85°	48	83	88	81	81	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1577.3	1577.3	1577.3	1577.3	1577.3
2.5°	1584.6	1573.0	1578.8	1575.9	1570.1
5°	1578.8	1565.7	1573.0	1570.1	1570.1
7.5°	1565.7	1555.6	1561.4	1559.9	1561.4
10°	1549.8	1539.6	1548.3	1548.3	1546.9
12.5°	1528.0	1519.3	1529.5	1529.5	1530.9
15°	1503.4	1496.1	1506.3	1510.6	1512.1
17.5°	1472.9	1465.7	1478.7	1483.1	1487.4
20°	1438.1	1435.2	1448.3	1452.6	1458.4
22.5°	1399.0	1399.0	1412.0	1417.8	1426.5
25°	1359.9	1358.4	1374.4	1383.0	1388.8
27.5°	1313.5	1314.9	1335.2	1343.9	1351.2
30°	1264.2	1267.1	1290.3	1300.4	1310.6
32.5°	1212.0	1217.8	1243.9	1255.5	1265.6
35°	1158.3	1165.6	1194.6	1207.6	1219.2
37.5°	1104.7	1114.8	1145.3	1158.3	1171.4
40°	1048.2	1056.9	1091.7	1107.6	1123.5
42.5°	990.2	1001.8	1036.6	1059.8	1078.6
45°	930.7	943.8	981.5	1010.5	1032.2
47.5°	871.3	888.7	924.9	964.1	982.9
50°	811.9	829.2	869.8	913.3	932.2
52.5°	751.0	768.4	814.8	859.7	880.0
55°	693.0	710.4	759.7	809.0	829.2
57.5°	632.1	650.9	706.0	756.8	777.1
60°	572.6	591.5	650.9	704.6	726.3
62.5°	514.7	535.0	597.3	653.8	675.6
65°	455.2	478.4	543.7	603.1	626.3
67.5°	397.2	423.3	491.5	553.8	578.4
70°	339.2	369.7	442.2	506.0	530.6
72.5°	282.7	316.0	392.9	456.7	469.7
75°	227.6	266.8	346.5	376.9	374.0
77.5°	175.4	218.9	294.3	300.1	308.8
80°	127.6	175.4	220.4	232.0	226.2
82.5°	84.1	131.9	158.0	152.2	150.8
85°	47.8	82.6	88.4	81.2	81.2
87.5°	20.3	33.3	29.0	21.7	20.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)