

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: P261244

Luminaire Tested: **24CZ-LD5-45SE-S-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261244
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-L82765-W2A1-U-5000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED AT 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4759.0 lumens
Efficiency: N/A
Efficacy: 132.9 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

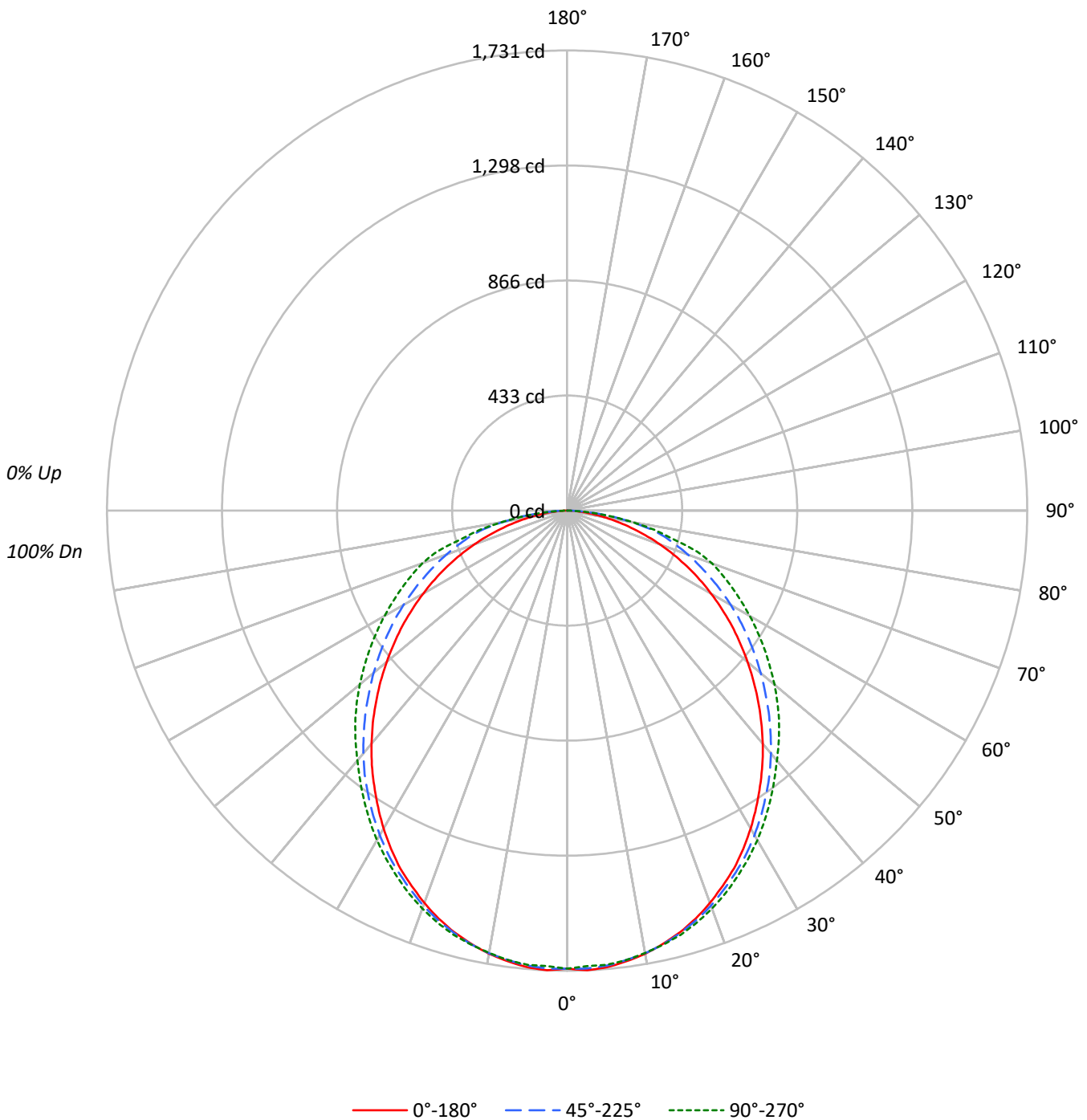
Input Watts (W): 35.805
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2318	2318	2318
5°	2329	2321	2316
10°	2313	2311	2308
15°	2287	2292	2301
20°	2249	2265	2281
25°	2205	2229	2252
30°	2145	2190	2224
35°	2078	2143	2187
40°	2011	2094	2155
45°	1934	2040	2145
50°	1856	1989	2131
55°	1776	1947	2125
60°	1683	1913	2135
65°	1583	1890	2178
70°	1458	1900	2280
75°	1292	1968	2124
80°	1079	1865	1914
85°	807	1491	1369



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.9	3.4
10°-20°	463.3	9.7
20°-30°	690.4	14.5
30°-40°	812.7	17.1
40°-50°	825.9	17.4
50°-60°	742.5	15.6
60°-70°	586.6	12.3
70°-80°	372.1	7.8
80°-90°	102.7	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°	1316.5	27.7
0°-40°	2129.2	44.7
0°-60°	3697.6	77.7
0°-90°	4759.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4759.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1723	1723	1723	1723	1723	
5°	1724	1710	1718	1715	1715	164
15°	1642	1634	1645	1650	1652	463
25°	1485	1484	1501	1511	1517	683
35°	1265	1273	1305	1319	1332	792
45°	1017	1031	1072	1104	1128	784
55°	757	776	830	884	906	676
65°	497	523	594	659	684	493
75°	249	291	378	412	408	265
85°	52	90	97	89	89	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1722.8	1722.8	1722.8	1722.8	1722.8
2.5°	1730.8	1718.1	1724.4	1721.3	1714.9
5°	1724.4	1710.2	1718.1	1714.9	1714.9
7.5°	1710.2	1699.1	1705.4	1703.8	1705.4
10°	1692.8	1681.7	1691.2	1691.2	1689.6
12.5°	1669.0	1659.5	1670.6	1670.6	1672.2
15°	1642.1	1634.2	1645.3	1650.0	1651.6
17.5°	1608.8	1600.9	1615.2	1619.9	1624.7
20°	1570.8	1567.7	1581.9	1586.7	1593.0
22.5°	1528.1	1528.1	1542.3	1548.7	1558.2
25°	1485.3	1483.7	1501.2	1510.7	1517.0
27.5°	1434.6	1436.2	1458.4	1467.9	1475.8
30°	1380.8	1384.0	1409.3	1420.4	1431.5
32.5°	1323.8	1330.1	1358.6	1371.3	1382.4
35°	1265.2	1273.1	1304.8	1319.1	1331.7
37.5°	1206.6	1217.7	1251.0	1265.2	1279.5
40°	1144.9	1154.4	1192.4	1209.8	1227.2
42.5°	1081.5	1094.2	1132.2	1157.5	1178.1
45°	1016.6	1030.9	1072.0	1103.7	1127.5
47.5°	951.7	970.7	1010.3	1053.0	1073.6
50°	886.8	905.8	950.1	997.6	1018.2
52.5°	820.3	839.3	889.9	939.0	961.2
55°	756.9	775.9	829.8	883.6	905.8
57.5°	690.4	711.0	771.2	826.6	848.8
60°	625.5	646.1	711.0	769.6	793.3
62.5°	562.1	584.3	652.4	714.2	737.9
65°	497.2	522.6	593.8	658.7	684.1
67.5°	433.9	462.4	536.8	604.9	631.8
70°	370.5	403.8	483.0	552.6	579.6
72.5°	308.8	345.2	429.1	498.8	513.1
75°	248.6	291.4	378.5	411.7	408.5
77.5°	191.6	239.1	321.5	327.8	337.3
80°	139.3	191.6	240.7	253.4	247.0
82.5°	91.8	144.1	172.6	166.3	164.7
85°	52.3	90.3	96.6	88.7	88.7
87.5°	22.2	36.4	31.7	23.8	22.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)