

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: P261288

Luminaire Tested: **24CZ-LD5-45-S-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261288
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-L92765-W2A1-U-4500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 90 CRI LEDS TUNED AT 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4145.0 lumens
Efficiency: N/A
Efficacy: 129.6 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

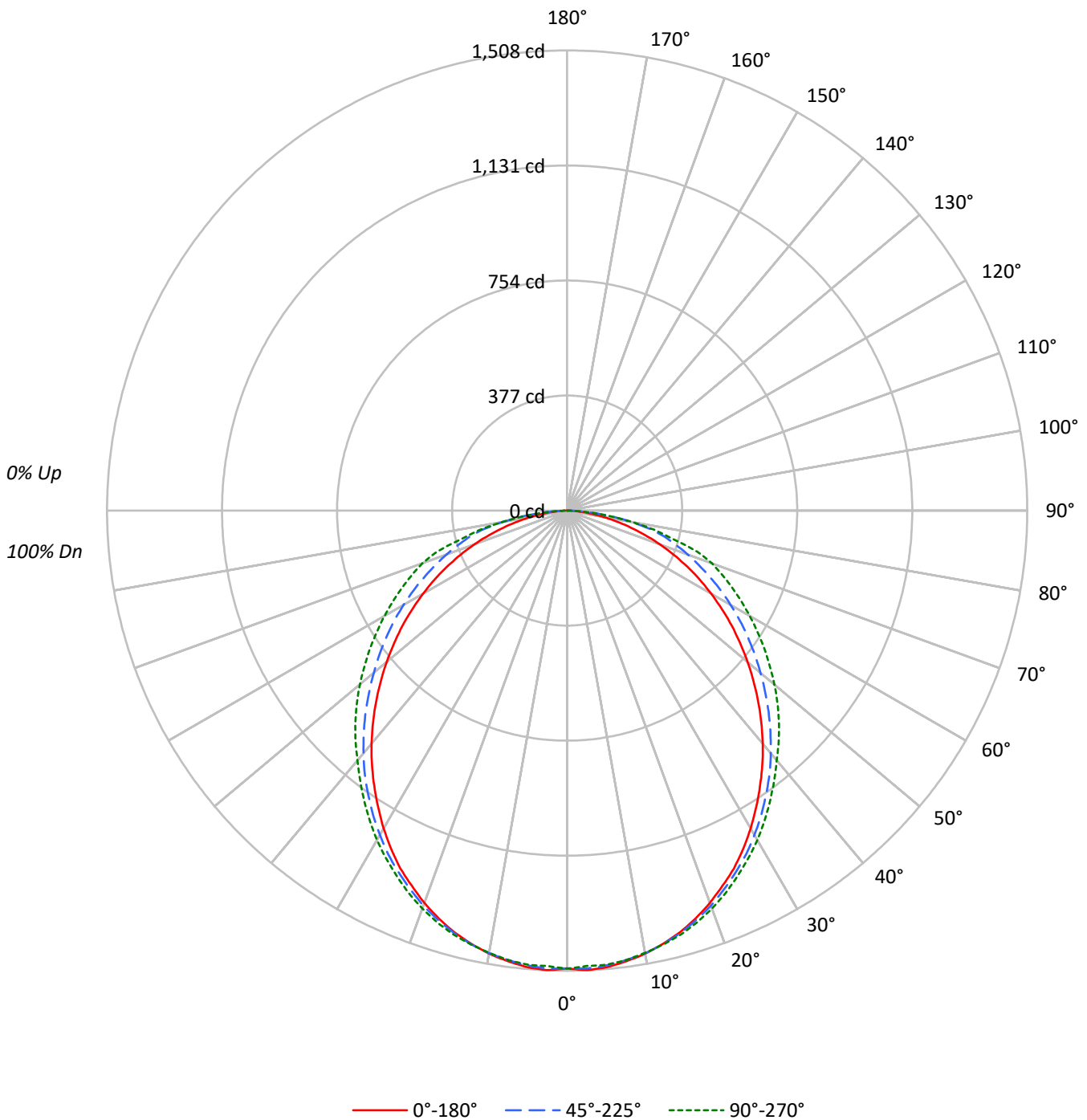
Input Watts (W): 31.992
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2019	2019	2019
5°	2029	2021	2017
10°	2014	2012	2011
15°	1992	1996	2004
20°	1959	1973	1987
25°	1921	1941	1962
30°	1869	1907	1937
35°	1810	1867	1905
40°	1751	1824	1877
45°	1685	1777	1869
50°	1617	1732	1856
55°	1547	1695	1851
60°	1466	1667	1859
65°	1379	1647	1897
70°	1269	1655	1986
75°	1125	1713	1850
80°	941	1624	1667
85°	702	1298	1192



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.9	3.4
10°-20°	403.5	9.7
20°-30°	601.3	14.5
30°-40°	707.8	17.1
40°-50°	719.3	17.4
50°-60°	646.7	15.6
60°-70°	510.9	12.3
70°-80°	324.1	7.8
80°-90°	89.4	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
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0°-30°	1146.7	27.7
0°-40°	1854.5	44.7
0°-60°	3220.5	77.7
0°-90°	4145.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4145.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1501	1501	1501	1501	1501	
5°	1502	1490	1496	1494	1494	142
15°	1430	1423	1433	1437	1438	403
25°	1294	1292	1308	1316	1321	595
35°	1102	1109	1136	1149	1160	689
45°	885	898	934	961	982	683
55°	659	676	723	770	789	589
65°	433	455	517	574	596	429
75°	216	254	330	359	356	230
85°	46	79	84	77	77	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1500.6	1500.6	1500.6	1500.6	1500.6
2.5°	1507.5	1496.4	1501.9	1499.2	1493.7
5°	1501.9	1489.5	1496.4	1493.7	1493.7
7.5°	1489.5	1479.9	1485.4	1484.0	1485.4
10°	1474.4	1464.7	1473.0	1473.0	1471.6
12.5°	1453.7	1445.4	1455.1	1455.1	1456.4
15°	1430.2	1423.3	1433.0	1437.1	1438.5
17.5°	1401.3	1394.4	1406.8	1410.9	1415.1
20°	1368.2	1365.4	1377.8	1382.0	1387.5
22.5°	1330.9	1330.9	1343.3	1348.9	1357.1
25°	1293.7	1292.3	1307.5	1315.8	1321.3
27.5°	1249.6	1250.9	1270.2	1278.5	1285.4
30°	1202.7	1205.4	1227.5	1237.1	1246.8
32.5°	1153.0	1158.5	1183.4	1194.4	1204.0
35°	1102.0	1108.9	1136.5	1148.9	1159.9
37.5°	1050.9	1060.6	1089.6	1102.0	1114.4
40°	997.2	1005.4	1038.5	1053.7	1068.9
42.5°	942.0	953.0	986.1	1008.2	1026.1
45°	885.4	897.9	933.7	961.3	982.0
47.5°	828.9	845.4	879.9	917.2	935.1
50°	772.4	788.9	827.5	868.9	886.8
52.5°	714.4	731.0	775.1	817.9	837.2
55°	659.3	675.8	722.7	769.6	788.9
57.5°	601.3	619.3	671.7	719.9	739.2
60°	544.8	562.7	619.3	670.3	691.0
62.5°	489.6	508.9	568.2	622.0	642.7
65°	433.1	455.1	517.2	573.7	595.8
67.5°	377.9	402.7	467.5	526.9	550.3
70°	322.7	351.7	420.7	481.3	504.8
72.5°	268.9	300.7	373.8	434.4	446.9
75°	216.5	253.8	329.6	358.6	355.8
77.5°	166.9	208.3	280.0	285.5	293.8
80°	121.4	166.9	209.6	220.7	215.2
82.5°	80.0	125.5	150.3	144.8	143.4
85°	45.5	78.6	84.1	77.2	77.2
87.5°	19.3	31.7	27.6	20.7	19.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)