

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: P276166

Luminaire Tested: **24CZ2-45-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276166
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-45-UNV-L82765-W2A1-U-5700K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4469.9 lumens
Efficiency: N/A
Efficacy: 124.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

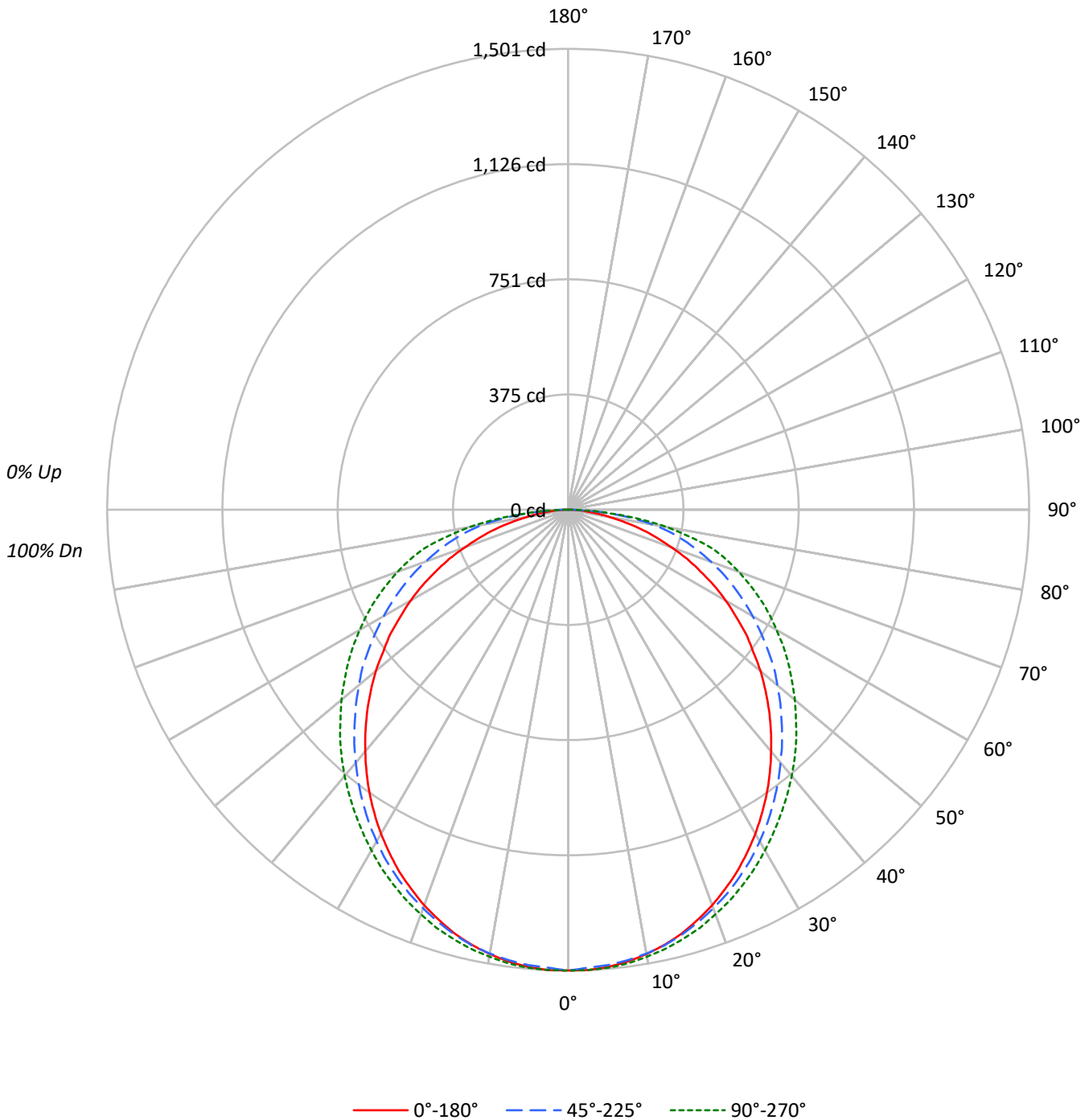
Input Watts (W): 35.991
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2019	2019	2019
5°	2019	2011	2023
10°	2008	2006	2020
15°	1991	1995	2016
20°	1963	1978	2008
25°	1931	1960	2000
30°	1894	1938	1991
35°	1852	1914	1985
40°	1805	1889	1989
45°	1760	1871	1998
50°	1711	1861	2017
55°	1659	1858	2054
60°	1594	1867	2108
65°	1510	1895	2199
70°	1402	1943	2324
75°	1279	2039	2520
80°	1052	2196	2520
85°	806	2027	2164



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.9	3.2
10°-20°	405.2	9.1
20°-30°	609.8	13.6
30°-40°	730.7	16.3
40°-50°	761.5	17.0
50°-60°	708.5	15.9
60°-70°	583.6	13.1
70°-80°	397.4	8.9
80°-90°	131.2	2.9
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°	1156.9	25.9
0°-40°	1887.7	42.2
0°-60°	3357.7	75.1
0°-90°	4469.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4469.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1501	1501	1501	1501	1501	
5°	1495	1495	1489	1496	1498	142
15°	1429	1431	1432	1446	1447	403
25°	1301	1307	1320	1343	1347	599
35°	1128	1141	1165	1196	1208	705
45°	925	944	983	1032	1050	713
55°	707	731	792	855	876	630
65°	474	515	595	665	691	471
75°	246	301	392	462	485	260
85°	52	101	131	140	140	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1500.7	1500.7	1500.7	1500.7	1500.7
2.5°	1500.7	1500.7	1493.3	1500.7	1500.7
5°	1494.8	1494.8	1488.8	1496.3	1497.8
7.5°	1484.3	1485.8	1479.9	1488.8	1490.3
10°	1469.4	1470.9	1467.9	1476.9	1478.4
12.5°	1451.5	1453.0	1453.0	1463.4	1464.9
15°	1429.1	1430.6	1432.1	1445.5	1447.0
17.5°	1400.8	1405.3	1408.2	1424.7	1427.6
20°	1371.0	1375.4	1381.4	1399.3	1402.3
22.5°	1336.6	1342.6	1353.0	1372.4	1376.9
25°	1300.8	1306.8	1320.2	1342.6	1347.1
27.5°	1260.6	1269.5	1285.9	1309.8	1315.8
30°	1218.8	1227.7	1247.1	1272.5	1281.4
32.5°	1174.0	1186.0	1208.3	1236.7	1245.6
35°	1127.8	1141.2	1165.1	1196.4	1208.3
37.5°	1078.6	1093.5	1121.8	1156.1	1171.1
40°	1027.8	1045.7	1075.6	1115.9	1132.3
42.5°	977.1	993.5	1030.8	1074.1	1092.0
45°	924.9	944.3	983.1	1032.3	1050.2
47.5°	871.2	890.6	936.8	989.1	1005.5
50°	817.5	836.9	889.1	944.3	963.7
52.5°	759.3	784.7	844.4	899.5	918.9
55°	707.1	731.0	792.1	854.8	875.7
57.5°	647.4	675.8	742.9	808.5	830.9
60°	592.2	622.1	693.7	760.8	783.2
62.5°	535.6	568.4	644.5	713.1	738.4
65°	474.4	514.7	595.2	665.3	690.7
67.5°	419.2	461.0	546.0	617.6	640.0
70°	356.5	407.3	493.8	565.4	590.7
72.5°	302.8	353.6	444.6	514.7	540.0
75°	246.1	301.3	392.3	462.5	484.8
77.5°	189.5	250.6	341.6	395.3	402.8
80°	135.8	199.9	283.4	314.8	325.2
82.5°	95.5	153.7	208.9	229.7	235.7
85°	52.2	101.4	131.3	140.2	140.2
87.5°	22.4	43.3	52.2	53.7	55.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)