

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: P276039

Luminaire Tested: **24CZ2-50-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276039
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: 24CZ2-50-UNV-L93050-W2A1-U-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4343.9 lumens
Efficiency: N/A
Efficacy: 106.6 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

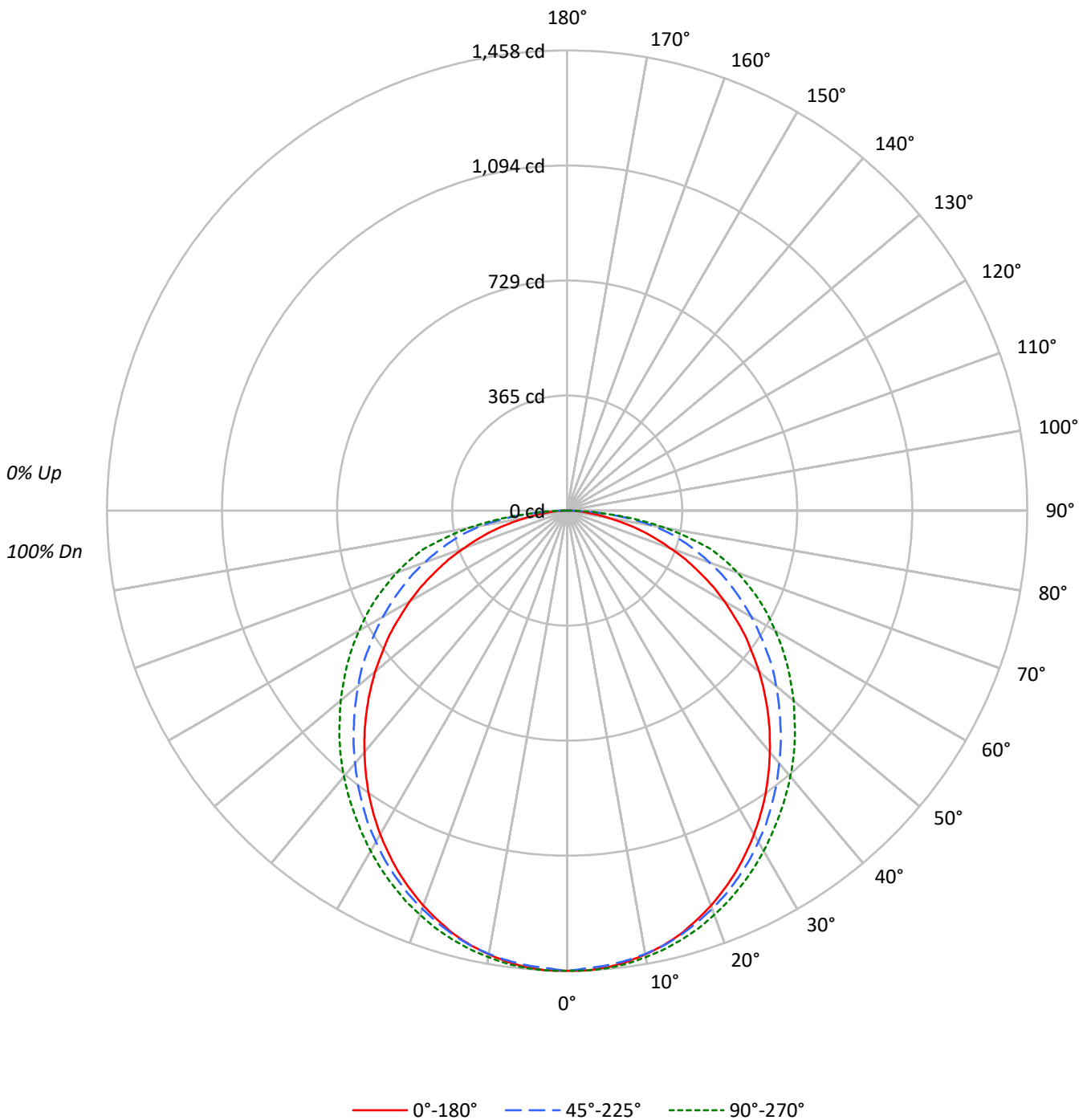
Input Watts (W): 40.743486
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1962	1962	1962
5°	1962	1954	1966
10°	1951	1949	1963
15°	1935	1939	1959
20°	1908	1922	1951
25°	1877	1905	1943
30°	1840	1883	1935
35°	1800	1860	1929
40°	1754	1836	1933
45°	1710	1818	1942
50°	1663	1809	1960
55°	1612	1806	1996
60°	1549	1814	2048
65°	1468	1841	2137
70°	1363	1888	2258
75°	1243	1982	2450
80°	1022	2135	2448
85°	783	1970	2104



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.9	3.2
10°-20°	393.8	9.1
20°-30°	592.6	13.6
30°-40°	710.2	16.3
40°-50°	740.1	17.0
50°-60°	688.5	15.9
60°-70°	567.1	13.1
70°-80°	386.2	8.9
80°-90°	127.5	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°	1124.3	25.9
0°-40°	1834.5	42.2
0°-60°	3263.1	75.1
0°-90°	4343.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4343.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1458	1458	1458	1458	1458	
5°	1453	1453	1447	1454	1456	138
15°	1389	1390	1392	1405	1406	391
25°	1264	1270	1283	1305	1309	582
35°	1096	1109	1132	1163	1174	685
45°	899	918	955	1003	1021	693
55°	687	710	770	831	851	613
65°	461	500	578	647	671	458
75°	239	293	381	449	471	252
85°	51	99	128	136	136	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1458.4	1458.4	1458.4	1458.4	1458.4
2.5°	1458.4	1458.4	1451.2	1458.4	1458.4
5°	1452.6	1452.6	1446.8	1454.1	1455.5
7.5°	1442.5	1443.9	1438.1	1446.8	1448.3
10°	1428.0	1429.4	1426.5	1435.2	1436.7
12.5°	1410.6	1412.0	1412.0	1422.2	1423.6
15°	1388.9	1390.3	1391.8	1404.8	1406.3
17.5°	1361.3	1365.7	1368.6	1384.5	1387.4
20°	1332.3	1336.7	1342.5	1359.9	1362.8
22.5°	1299.0	1304.8	1314.9	1333.8	1338.1
25°	1264.2	1270.0	1283.0	1304.8	1309.1
27.5°	1225.0	1233.7	1249.7	1272.9	1278.7
30°	1184.4	1193.1	1212.0	1236.6	1245.3
32.5°	1140.9	1152.5	1174.3	1201.8	1210.5
35°	1096.0	1109.1	1132.2	1162.7	1174.3
37.5°	1048.2	1062.7	1090.2	1123.6	1138.0
40°	998.9	1016.3	1045.3	1084.4	1100.4
42.5°	949.6	965.5	1001.8	1043.8	1061.2
45°	898.8	917.7	955.4	1003.2	1020.6
47.5°	846.6	865.5	910.4	961.2	977.1
50°	794.5	813.3	864.0	917.7	936.5
52.5°	737.9	762.6	820.6	874.2	893.0
55°	687.2	710.4	769.8	830.7	851.0
57.5°	629.2	656.7	722.0	785.8	807.5
60°	575.5	604.5	674.1	739.4	761.1
62.5°	520.5	552.4	626.3	693.0	717.6
65°	461.0	500.2	578.4	646.6	671.2
67.5°	407.4	448.0	530.6	600.2	621.9
70°	346.5	395.8	479.9	549.5	574.1
72.5°	294.3	343.6	432.0	500.2	524.8
75°	239.2	292.8	381.3	449.4	471.2
77.5°	184.1	243.6	332.0	384.2	391.4
80°	131.9	194.3	275.5	305.9	316.0
82.5°	92.8	149.3	203.0	223.3	229.1
85°	50.7	98.6	127.6	136.3	136.3
87.5°	21.7	42.0	50.7	52.2	53.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)