

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: P276297

Luminaire Tested: **24CZ2-45-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276297
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-L92765-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: 3786.8 lumens
Efficiency: N/A
Efficacy: 107.2 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

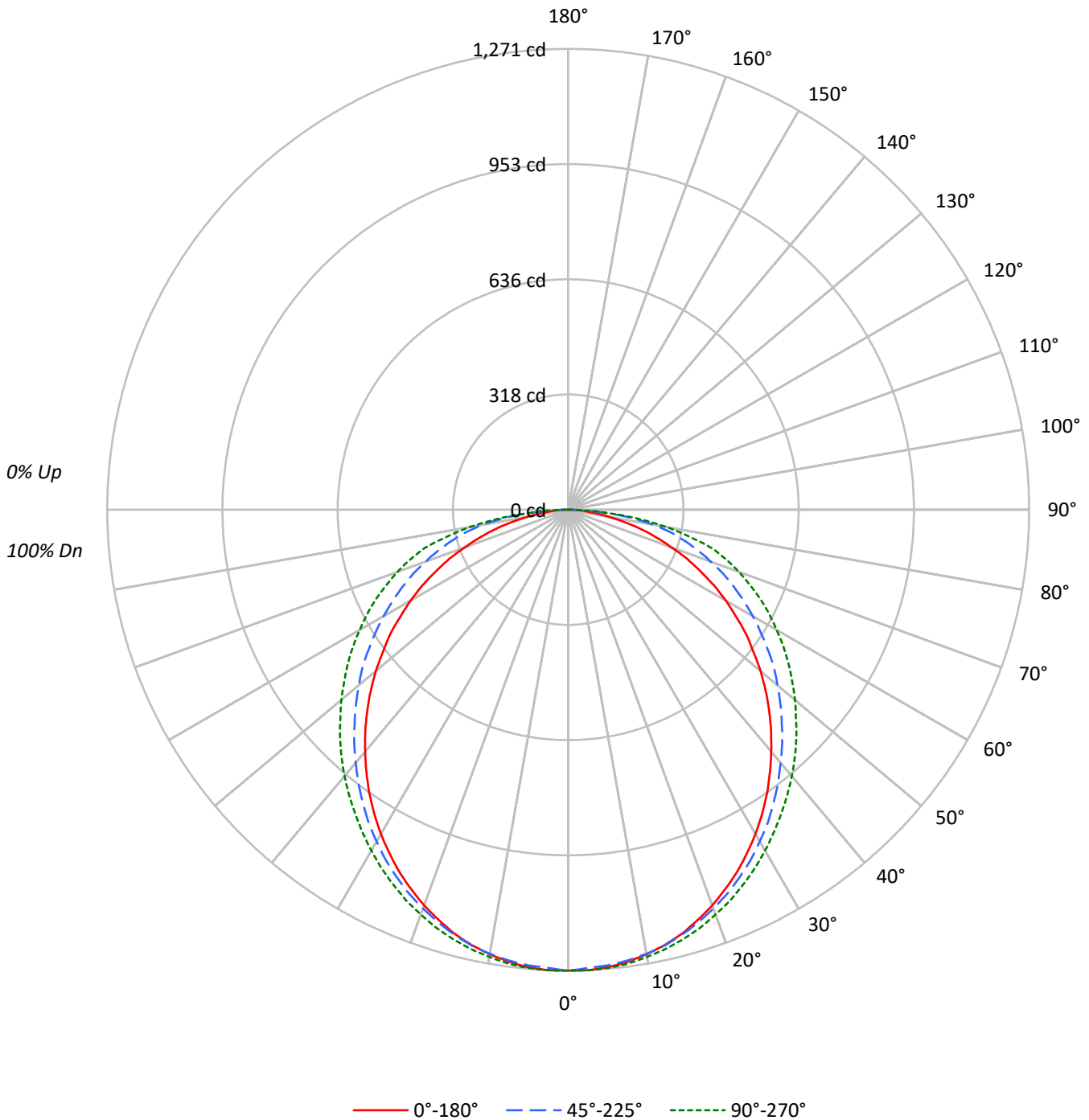
Input Watts (W): 35.34
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1711	1711	1711
5°	1710	1704	1714
10°	1701	1699	1711
15°	1687	1690	1708
20°	1663	1676	1701
25°	1636	1661	1694
30°	1604	1642	1687
35°	1569	1621	1681
40°	1529	1600	1685
45°	1491	1585	1693
50°	1450	1577	1709
55°	1405	1574	1740
60°	1350	1581	1785
65°	1280	1606	1863
70°	1188	1646	1969
75°	1084	1728	2135
80°	891	1860	2135
85°	682	1717	1834



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.2	3.2
10°-20°	343.3	9.1
20°-30°	516.6	13.6
30°-40°	619.1	16.3
40°-50°	645.2	17.0
50°-60°	600.2	15.9
60°-70°	494.4	13.1
70°-80°	336.7	8.9
80°-90°	111.2	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°	980.1	25.9
0°-40°	1599.2	42.2
0°-60°	2844.6	75.1
0°-90°	3786.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3786.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1271	1271	1271	1271	1271	
5°	1266	1266	1261	1268	1269	120
15°	1211	1212	1213	1225	1226	341
25°	1102	1107	1118	1138	1141	507
35°	956	967	987	1014	1024	597
45°	784	800	833	875	890	604
55°	599	619	671	724	742	534
65°	402	436	504	564	585	399
75°	208	255	332	392	411	220
85°	44	86	111	119	119	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1271.4	1271.4	1271.4	1271.4	1271.4
2.5°	1271.4	1271.4	1265.1	1271.4	1271.4
5°	1266.4	1266.4	1261.3	1267.6	1268.9
7.5°	1257.5	1258.8	1253.7	1261.3	1262.6
10°	1244.9	1246.1	1243.6	1251.2	1252.5
12.5°	1229.7	1231.0	1231.0	1239.8	1241.1
15°	1210.8	1212.0	1213.3	1224.7	1225.9
17.5°	1186.7	1190.5	1193.1	1207.0	1209.5
20°	1161.5	1165.3	1170.3	1185.5	1188.0
22.5°	1132.4	1137.5	1146.3	1162.7	1166.5
25°	1102.1	1107.1	1118.5	1137.5	1141.2
27.5°	1067.9	1075.5	1089.4	1109.6	1114.7
30°	1032.6	1040.1	1056.6	1078.1	1085.6
32.5°	994.6	1004.7	1023.7	1047.7	1055.3
35°	955.5	966.8	987.1	1013.6	1023.7
37.5°	913.8	926.4	950.4	979.5	992.1
40°	870.8	885.9	911.2	945.3	959.3
42.5°	827.8	841.7	873.3	910.0	925.1
45°	783.6	800.0	832.9	874.6	889.7
47.5°	738.1	754.5	793.7	837.9	851.8
50°	692.6	709.0	753.2	800.0	816.4
52.5°	643.3	664.8	715.3	762.1	778.5
55°	599.1	619.3	671.1	724.2	741.9
57.5°	548.5	572.5	629.4	685.0	704.0
60°	501.7	527.0	587.7	644.6	663.5
62.5°	453.7	481.5	546.0	604.1	625.6
65°	401.9	436.0	504.3	563.7	585.2
67.5°	355.1	390.5	462.6	523.2	542.2
70°	302.1	345.0	418.3	479.0	500.5
72.5°	256.6	299.5	376.6	436.0	457.5
75°	208.5	255.3	332.4	391.8	410.7
77.5°	160.5	212.3	289.4	334.9	341.2
80°	115.0	169.4	240.1	266.7	275.5
82.5°	80.9	130.2	176.9	194.6	199.7
85°	44.2	85.9	111.2	118.8	118.8
87.5°	19.0	36.7	44.2	45.5	46.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)