

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: P276369

Luminaire Tested: **24CZ2-35-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276369
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-35-S-UNV-L83050-W2A1-U-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3712.0 lumens
Efficiency: N/A
Efficacy: 139.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.27 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

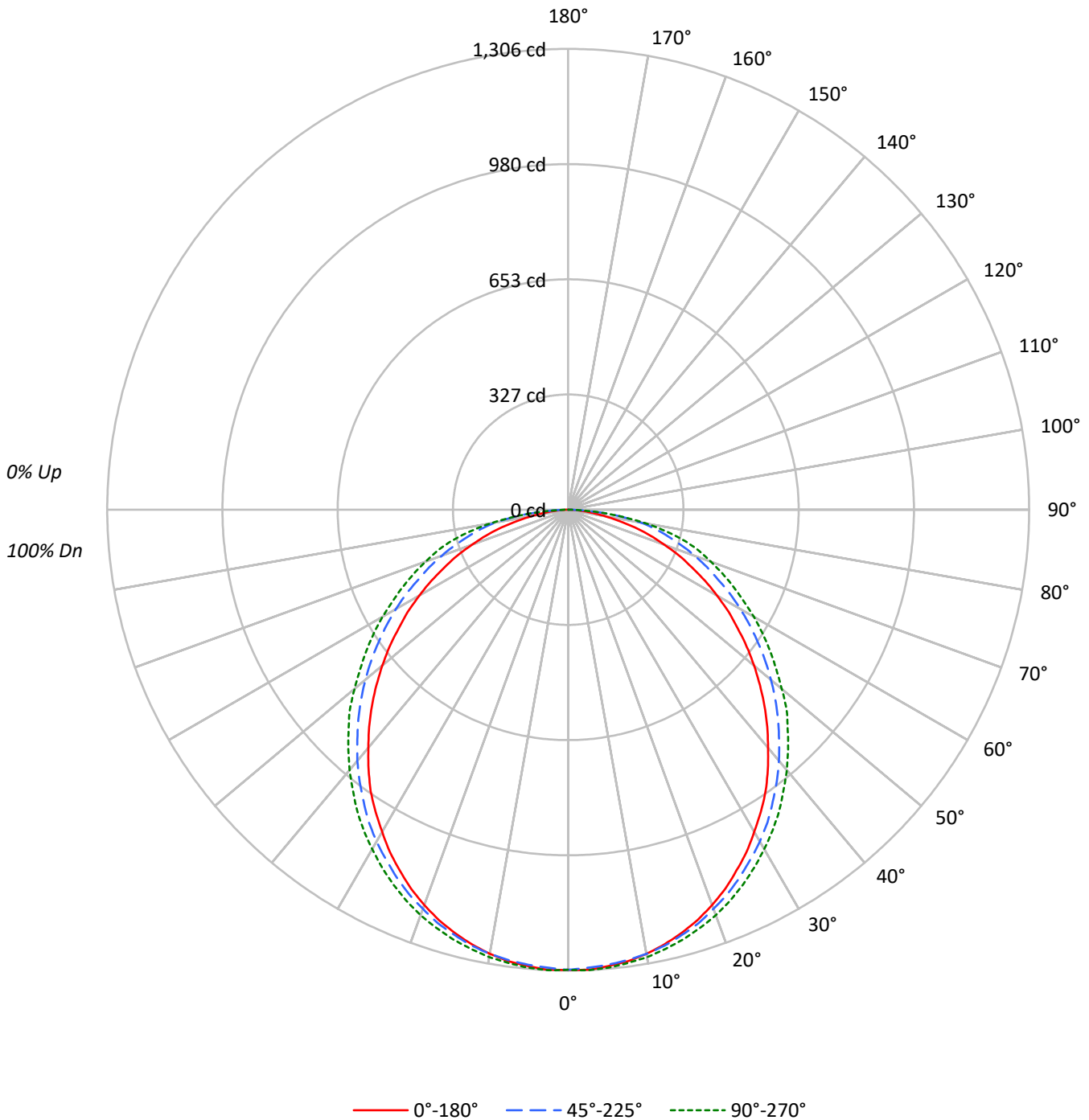
Input Watts (W): 26.63892
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1755	1755	1755
5°	1753	1749	1760
10°	1746	1746	1759
15°	1729	1738	1756
20°	1707	1724	1751
25°	1675	1707	1740
30°	1638	1687	1726
35°	1602	1660	1712
40°	1547	1632	1692
45°	1496	1600	1674
50°	1439	1570	1654
55°	1375	1540	1637
60°	1311	1517	1634
65°	1228	1490	1644
70°	1137	1498	1688
75°	1017	1526	1784
80°	822	1617	1745
85°	619	1420	1383



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.5	3.3
10°-20°	352.8	9.5
20°-30°	530.3	14.3
30°-40°	631.6	17.0
40°-50°	646.4	17.4
50°-60°	582.0	15.7
60°-70°	457.0	12.3
70°-80°	296.6	8.0
80°-90°	91.8	2.5
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°	1006.5	27.1
0°-40°	1638.1	44.1
0°-60°	2866.6	77.2
0°-90°	3712.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3712.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1304	1304	1304	1304	1304	
5°	1298	1300	1295	1302	1303	123
15°	1242	1245	1248	1258	1260	350
25°	1128	1138	1150	1168	1172	520
35°	975	987	1010	1035	1042	608
45°	786	805	841	872	880	606
55°	586	612	657	691	698	525
65°	386	415	468	507	516	384
75°	196	234	294	334	343	207
85°	40	74	92	90	90	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1304.0	1304.0	1304.0	1304.0	1304.0
2.5°	1305.2	1305.2	1299.3	1305.2	1306.4
5°	1298.2	1300.5	1294.6	1301.7	1302.9
7.5°	1291.1	1291.1	1287.5	1294.6	1295.8
10°	1278.1	1279.3	1278.1	1286.4	1287.5
12.5°	1261.6	1264.0	1265.1	1273.4	1274.6
15°	1241.6	1245.1	1247.5	1258.1	1260.4
17.5°	1219.2	1222.7	1228.6	1240.4	1242.7
20°	1192.0	1196.8	1203.8	1219.2	1222.7
22.5°	1162.6	1167.3	1179.1	1193.2	1199.1
25°	1128.4	1137.8	1149.6	1168.5	1172.0
27.5°	1094.2	1102.4	1117.8	1137.8	1142.5
30°	1054.1	1067.1	1085.9	1106.0	1110.7
32.5°	1015.2	1028.1	1050.6	1071.8	1077.7
35°	975.1	986.9	1010.5	1035.2	1042.3
37.5°	929.1	944.4	970.4	995.1	1002.2
40°	880.8	899.6	929.1	955.0	963.3
42.5°	834.8	854.8	884.3	912.6	922.0
45°	786.4	805.3	840.7	872.5	879.6
47.5°	736.9	758.1	795.9	827.7	839.5
50°	687.4	709.8	749.9	782.9	790.0
52.5°	637.9	661.5	703.9	739.3	742.8
55°	586.0	611.9	656.7	690.9	698.0
57.5°	538.8	561.2	609.6	645.0	653.2
60°	487.0	511.7	563.6	596.6	607.2
62.5°	437.4	463.4	517.6	550.6	560.1
65°	385.6	415.0	468.1	507.0	516.4
67.5°	340.8	369.0	425.6	463.4	472.8
70°	288.9	320.7	380.8	419.7	429.2
72.5°	244.1	277.1	337.2	374.9	389.1
75°	195.7	233.5	293.6	333.7	343.1
77.5°	148.6	192.2	253.5	284.2	284.2
80°	106.1	152.1	208.7	222.8	225.2
82.5°	69.6	114.4	154.5	153.3	153.3
85°	40.1	74.3	92.0	89.6	89.6
87.5°	15.3	30.7	33.0	33.0	31.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)