

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: P276062

Luminaire Tested: **24CZ2-40HE-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276062
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: 24CZ2-40HE-UNV-L82765-W2A1-U-3500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3763.2 lumens
Efficiency: N/A
Efficacy: 132.7 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

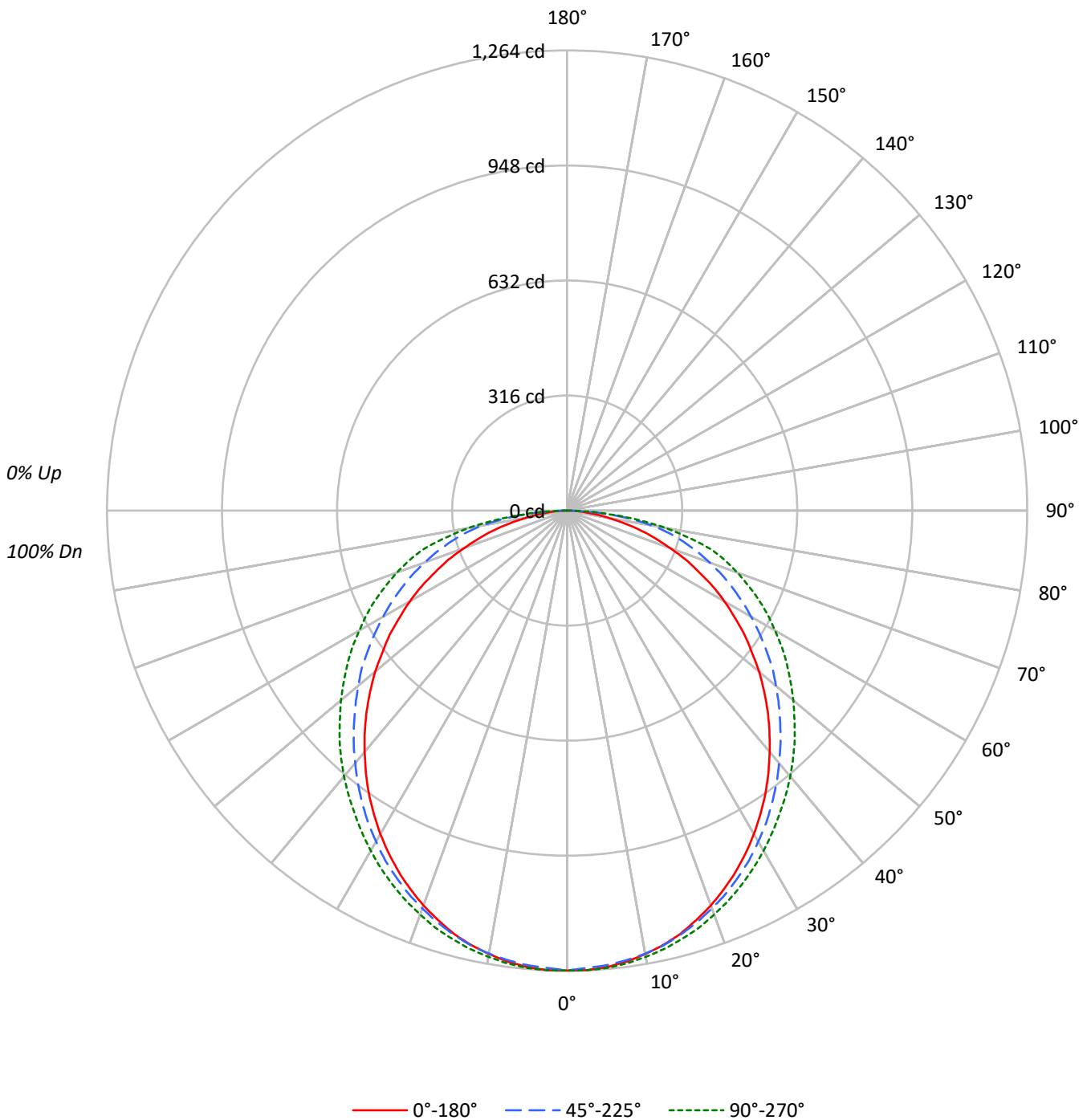
Input Watts (W): 28.365
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1700	1700	1700
5°	1700	1693	1703
10°	1690	1688	1700
15°	1676	1679	1697
20°	1653	1665	1690
25°	1626	1650	1684
30°	1594	1631	1676
35°	1560	1611	1671
40°	1520	1590	1674
45°	1482	1575	1682
50°	1441	1567	1698
55°	1396	1564	1729
60°	1342	1572	1774
65°	1272	1595	1851
70°	1181	1635	1957
75°	1077	1717	2122
80°	886	1849	2122
85°	679	1706	1823



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.5	3.2
10°-20°	341.1	9.1
20°-30°	513.4	13.6
30°-40°	615.2	16.3
40°-50°	641.1	17.0
50°-60°	596.5	15.9
60°-70°	491.3	13.1
70°-80°	334.6	8.9
80°-90°	110.5	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°	974.0	25.9
0°-40°	1589.2	42.2
0°-60°	2826.8	75.1
0°-90°	3763.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3763.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1264	1264	1264	1264	1264	
5°	1258	1258	1253	1260	1261	119
15°	1203	1204	1206	1217	1218	339
25°	1095	1100	1112	1130	1134	504
35°	950	961	981	1007	1017	594
45°	779	795	828	869	884	601
55°	595	615	667	720	737	531
65°	399	433	501	560	582	396
75°	207	254	330	389	408	219
85°	44	85	110	118	118	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1263.5	1263.5	1263.5	1263.5	1263.5
2.5°	1263.5	1263.5	1257.2	1263.5	1263.5
5°	1258.5	1258.5	1253.4	1259.7	1261.0
7.5°	1249.7	1250.9	1245.9	1253.4	1254.7
10°	1237.1	1238.4	1235.8	1243.4	1244.6
12.5°	1222.0	1223.3	1223.3	1232.1	1233.3
15°	1203.2	1204.4	1205.7	1217.0	1218.3
17.5°	1179.3	1183.1	1185.6	1199.4	1201.9
20°	1154.2	1158.0	1163.0	1178.1	1180.6
22.5°	1125.3	1130.3	1139.1	1155.5	1159.2
25°	1095.2	1100.2	1111.5	1130.3	1134.1
27.5°	1061.3	1068.8	1082.6	1102.7	1107.7
30°	1026.1	1033.6	1050.0	1071.3	1078.9
32.5°	988.4	998.5	1017.3	1041.2	1048.7
35°	949.5	960.8	980.9	1007.3	1017.3
37.5°	908.0	920.6	944.5	973.4	985.9
40°	865.3	880.4	905.5	939.4	953.3
42.5°	822.6	836.5	867.9	904.3	919.3
45°	778.7	795.0	827.7	869.1	884.2
47.5°	733.5	749.8	788.7	832.7	846.5
50°	688.3	704.6	748.5	795.0	811.3
52.5°	639.3	660.6	710.9	757.3	773.7
55°	595.3	615.4	666.9	719.7	737.2
57.5°	545.1	568.9	625.5	680.7	699.6
60°	498.6	523.7	584.0	640.5	659.4
62.5°	450.9	478.5	542.6	600.3	621.7
65°	399.4	433.3	501.1	560.1	581.5
67.5°	352.9	388.1	459.7	520.0	538.8
70°	300.2	342.9	415.7	476.0	497.4
72.5°	255.0	297.7	374.3	433.3	454.7
75°	207.2	253.7	330.3	389.3	408.2
77.5°	159.5	211.0	287.6	332.8	339.1
80°	114.3	168.3	238.6	265.0	273.8
82.5°	80.4	129.4	175.8	193.4	198.4
85°	44.0	85.4	110.5	118.1	118.1
87.5°	18.8	36.4	44.0	45.2	46.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)