

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: P328427

Luminaire Tested: **24CGT5540C**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P328427
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (IDL-RB2A40KL1-D30W0XL)
Test Lab: ETA Testing Technology Co., Ltd.
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CGT5540C
Description: 5500 LUMEN, 2X4 CGT LED TROFFER WITH 4000 CCT LEDS

Light Source: -
Ballast/Driver: -

Summary

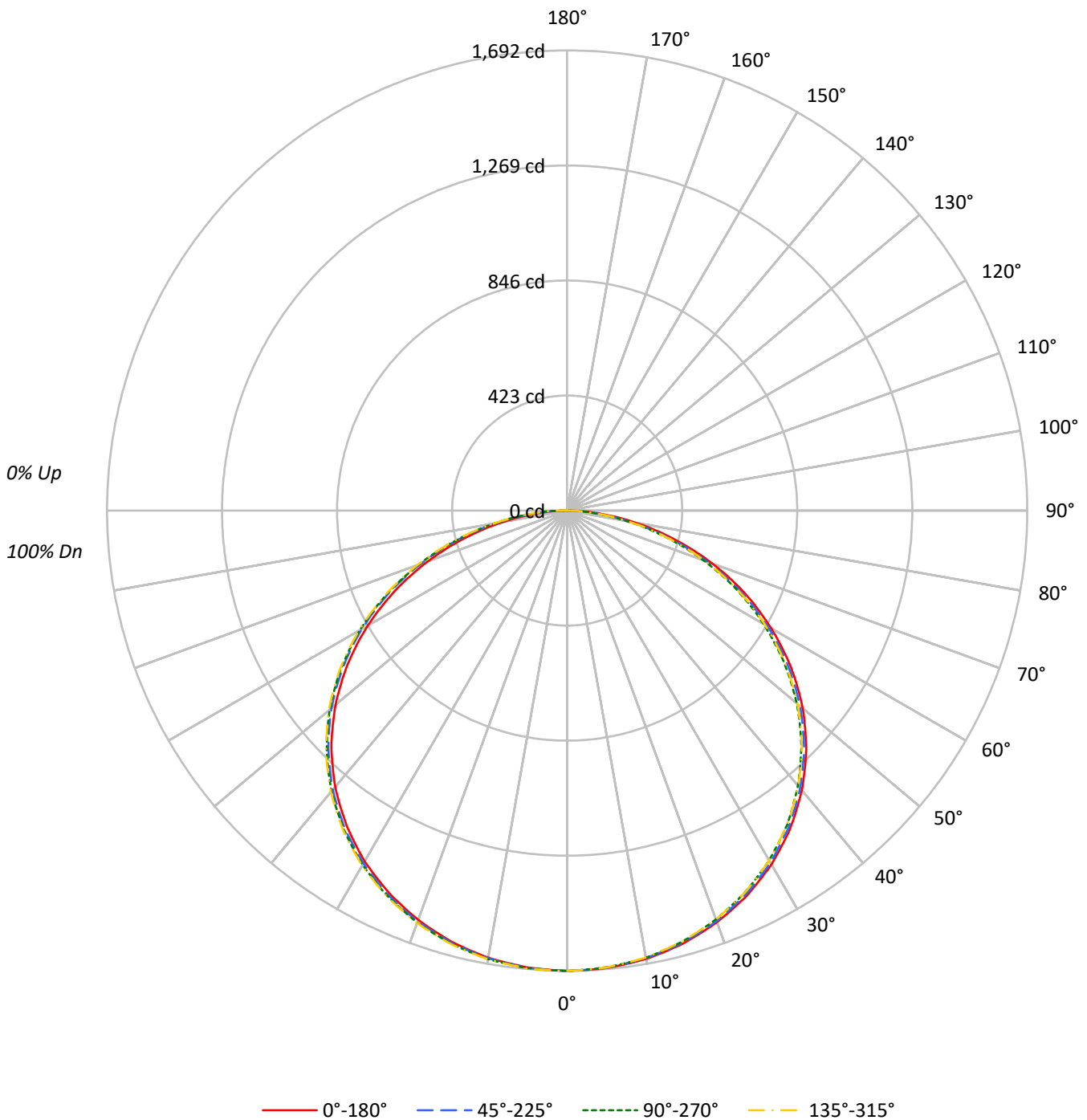
Lumens per Lamp: N/A
Luminaire Lumens: 5337.0 lumens
Efficiency: N/A
Efficacy: 114.0 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.31 / 1.44
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
Input Voltage (V): NR
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	105	101	97	93	97	93	90	93	90	87	89	87	85	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	74	70	68
3	89	78	70	63	86	76	69	62	73	67	61	71	65	60	68	63	59	57
4	81	69	60	53	79	67	59	52	65	58	52	63	56	51	60	55	50	48
5	75	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	34	62	49	40	34	47	40	34	46	39	34	45	38	34	31
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	27	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	2277	2277	2277	2277
5°	2280	2276	2277	2281
10°	2287	2281	2281	2288
15°	2296	2285	2286	2296
20°	2307	2291	2294	2309
25°	2320	2299	2302	2322
30°	2334	2307	2314	2337
35°	2347	2316	2322	2352
40°	2358	2318	2331	2368
45°	2366	2318	2333	2379
50°	2367	2306	2328	2386
55°	2358	2284	2312	2383
60°	2331	2243	2280	2369
65°	2299	2193	2224	2337
70°	2230	2093	2140	2282
75°	2121	1943	2018	2201
80°	1965	1718	1836	2097
85°	1743	1318	1502	1982



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.6	3.0
10°-20°	464.7	8.7
20°-30°	718.2	13.5
30°-40°	889.8	16.7
40°-50°	952.8	17.9
50°-60°	890.3	16.7
60°-70°	704.5	13.2
70°-80°	423.8	7.9
80°-90°	127.7	2.4
90°-100°	2.8	0.1
100°-110°	0.3	0.0
110°-120°	0.4	0.0
120°-130°	0.4	0.0
130°-140°	0.3	0.0
140°-150°	0.2	0.0
150°-160°	0.2	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	1343.4	25.2
0°-40°	2233.2	41.8
0°-60°	4076.3	76.4
0°-90°	5332.3	99.9
90°-120°	3.5	0.1
90°-150°	4.5	0.1
90°-180°	5.0	0.1
0°-180°	5337.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1692	1692	1692	1692	1692	
5°	1688	1685	1686	1689	1688	161
15°	1648	1640	1641	1649	1648	466
25°	1563	1548	1551	1564	1563	721
35°	1429	1410	1414	1432	1429	894
45°	1244	1218	1226	1250	1244	959
55°	1005	974	986	1016	1005	897
65°	722	689	699	734	722	713
75°	408	374	388	423	408	432
85°	113	85	97	128	113	124
90°	12	0	2	22	12	19
95°	0	0	0	0	0	3
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	1	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P328427
 CATALOG NUMBER: 24CGT5540C

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	1692.5	1692.5	1692.5	1692.5	1692.5	1692.5	1692.5	1692.5	1692.5	1692.5	1692.5
5°	1688.4	1688.7	1688.7	1686.9	1687.1	1686.9	1687.0	1686.8	1687.3	1685.4	1685.3
10°	1674.2	1673.6	1672.7	1671.6	1671.6	1670.5	1670.3	1669.2	1670.2	1669.5	1668.1
15°	1648.1	1648.1	1647.2	1645.2	1644.8	1643.5	1642.4	1641.8	1641.7	1640.5	1639.1
20°	1610.9	1610.7	1609.8	1607.8	1607.5	1605.5	1604.4	1602.4	1601.7	1599.9	1599.7
25°	1562.6	1561.4	1560.6	1558.4	1557.2	1554.7	1554.8	1551.8	1551.4	1548.4	1547.3
30°	1502.2	1500.4	1500.2	1497.0	1496.2	1493.4	1492.1	1488.9	1487.8	1485.2	1483.9
35°	1428.9	1426.7	1426.4	1422.6	1422.3	1418.5	1416.9	1413.2	1412.4	1410.1	1406.8
40°	1342.5	1340.4	1339.7	1336.5	1334.8	1331.3	1329.1	1325.2	1323.4	1320.0	1318.2
45°	1243.5	1239.9	1239.4	1235.5	1234.8	1230.1	1228.2	1222.7	1221.0	1218.3	1216.0
50°	1130.7	1126.3	1126.1	1121.7	1120.9	1115.6	1113.4	1107.6	1105.5	1101.6	1100.2
55°	1005.1	1000.3	1000.4	994.9	993.8	987.6	985.2	978.6	976.5	973.5	971.6
60°	866.3	862.1	860.7	855.7	854.3	848.6	845.5	838.2	836.5	833.7	831.7
65°	722.1	712.9	716.3	705.7	709.2	697.9	699.8	687.0	689.9	688.9	682.0
70°	566.9	556.5	559.1	548.6	551.5	540.5	541.8	530.4	532.6	532.1	525.8
75°	408.0	398.1	399.0	389.6	390.8	380.7	381.0	371.0	372.3	373.8	368.9
80°	253.6	244.8	244.3	235.7	235.7	226.9	227.2	218.5	220.1	221.7	217.8
85°	112.9	104.0	103.7	94.7	95.3	86.9	87.8	81.0	82.7	85.4	81.2
90°	12.5	15.3	0.2	1.5	0.1	0.5	0.1	8.3	0.1	0.2	8.7
95°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
100°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
105°	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
110°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3
115°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.3	0.3
120°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.3
125°	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.3
130°	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.4	0.4
135°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.3	0.4
140°	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.3	0.3
145°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3
150°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3
155°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4
160°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4
165°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4
170°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3
175°	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4
180°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5



TEST NUMBER: P328427
 CATALOG NUMBER: 24CGT5540C

CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	1692.5	1692.5	1692.5	1692.5	1692.5	1692.5	1692.5	1692.5	1692.5	1692.5	1692.5
5°	1685.3	1684.1	1685.1	1686.6	1686.3	1686.3	1685.4	1685.8	1686.3	1686.4	1686.8
10°	1667.6	1667.0	1667.3	1669.3	1668.3	1668.1	1668.5	1669.5	1669.6	1670.3	1670.6
15°	1639.1	1638.3	1638.1	1640.0	1640.8	1639.6	1640.1	1641.4	1643.0	1642.8	1644.1
20°	1598.7	1598.5	1599.4	1600.1	1601.4	1600.8	1601.7	1601.8	1603.7	1604.7	1606.1
25°	1547.3	1546.8	1547.9	1549.2	1550.3	1549.8	1550.9	1550.9	1554.1	1554.9	1556.7
30°	1485.1	1483.6	1485.2	1485.4	1487.6	1486.4	1488.3	1489.3	1492.0	1493.3	1495.8
35°	1408.4	1407.2	1409.4	1410.4	1412.3	1412.3	1413.9	1413.8	1417.9	1419.7	1422.1
40°	1319.6	1318.5	1322.1	1321.7	1323.9	1323.9	1326.4	1326.9	1330.7	1332.8	1336.6
45°	1216.9	1217.9	1220.3	1220.8	1222.8	1223.1	1226.0	1226.0	1230.4	1233.0	1237.9
50°	1102.3	1102.7	1105.4	1105.9	1108.8	1108.8	1110.7	1112.2	1117.6	1120.5	1125.7
55°	974.2	974.8	978.7	979.0	981.8	981.6	984.4	985.8	991.6	994.9	1001.4
60°	834.7	835.0	839.2	840.3	843.3	842.3	846.3	847.1	853.5	857.2	864.6
65°	690.7	685.9	695.1	690.5	699.1	693.8	702.7	698.6	711.3	710.7	721.2
70°	533.4	529.6	538.1	534.7	543.0	538.2	547.0	544.1	555.9	556.0	568.3
75°	375.1	372.3	379.5	376.6	384.4	381.5	389.5	388.1	398.6	399.3	410.4
80°	222.5	220.3	225.9	224.7	231.4	230.2	237.2	237.0	245.5	247.1	256.2
85°	85.4	82.0	87.0	84.9	91.3	90.5	98.0	97.3	106.0	106.0	114.3
90°	0.2	8.8	0.2	9.2	0.2	1.2	0.3	2.5	0.4	22.4	13.1
95°	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.8	0.4
100°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.6	0.4
105°	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.4
110°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4
115°	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
120°	0.3	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4
125°	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4
130°	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.5
135°	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.5
140°	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4
145°	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.4	0.4
150°	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4
155°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
160°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
165°	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4
170°	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4
175°	0.5	0.5	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.5
180°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5



TEST NUMBER: P328427
 CATALOG NUMBER: 24CGT5540C

CANDELA DISTRIBUTION (continued):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	1692.5	1692.5	1692.5	1692.5	1692.5	1692.5	1692.5	1692.5	1692.5	1692.5	1692.5
5°	1687.3	1687.7	1687.6	1688.1	1688.1	1688.7	1688.3	1689.2	1689.1	1689.4	1689.6
10°	1670.5	1672.0	1672.0	1673.1	1672.8	1674.9	1675.2	1675.0	1674.9	1674.5	1675.4
15°	1644.6	1645.6	1645.7	1646.7	1647.8	1648.6	1649.7	1650.1	1649.6	1650.1	1650.8
20°	1606.6	1608.3	1609.4	1610.0	1610.5	1612.3	1612.6	1613.3	1613.7	1614.0	1614.1
25°	1557.8	1560.2	1560.5	1562.3	1562.5	1563.9	1565.1	1565.0	1565.8	1566.0	1567.4
30°	1496.8	1499.2	1500.8	1501.7	1502.5	1504.4	1505.9	1505.5	1507.1	1507.0	1508.1
35°	1424.2	1427.4	1428.2	1429.8	1430.5	1431.8	1433.9	1433.5	1436.0	1434.6	1437.0
40°	1338.2	1342.2	1342.6	1345.4	1346.1	1348.4	1349.5	1350.1	1351.5	1351.3	1352.4
45°	1239.3	1244.1	1245.1	1247.9	1248.0	1250.1	1252.8	1252.8	1255.1	1253.1	1255.2
50°	1129.0	1133.6	1134.1	1137.4	1137.5	1140.0	1142.2	1142.6	1144.4	1144.0	1144.8
55°	1004.9	1009.8	1010.8	1014.2	1015.0	1016.0	1019.5	1018.7	1021.6	1020.2	1021.4
60°	868.5	874.2	875.2	879.3	879.0	880.3	883.6	883.9	886.7	884.7	885.7
65°	722.1	731.5	730.0	737.0	733.7	734.2	740.8	737.2	744.0	738.5	742.1
70°	568.1	579.2	575.6	584.9	580.2	580.1	588.2	583.9	591.3	584.1	588.8
75°	411.1	421.7	419.6	428.4	424.6	423.4	430.5	426.7	432.7	426.6	430.2
80°	257.9	266.5	266.5	273.9	272.1	270.7	276.1	273.0	277.3	271.8	273.7
85°	115.0	123.7	124.3	131.7	130.8	128.4	133.0	130.0	132.9	128.0	129.6
90°	1.6	15.6	7.0	27.5	23.9	22.5	22.6	23.6	22.1	31.0	17.3
95°	0.5	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
100°	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2
105°	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2
110°	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
115°	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
120°	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5
125°	0.4	0.4	0.4	0.4	0.4	0.6	0.6	0.5	0.5	0.5	0.5
130°	0.4	0.4	0.4	0.4	0.4	0.6	0.5	0.5	0.5	0.5	0.5
135°	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.5	0.5
140°	0.4	0.4	0.4	0.3	0.3	0.5	0.4	0.4	0.4	0.4	0.5
145°	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
150°	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.4
155°	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.4
160°	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4
165°	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
170°	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
175°	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5
180°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5



TEST NUMBER: P328427
 CATALOG NUMBER: 24CGT5540C

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	1692.5	1692.5	1692.5	1692.5
5°	1689.4	1688.7	1688.9	1688.4
10°	1675.3	1674.4	1674.4	1674.2
15°	1649.1	1649.5	1648.0	1648.1
20°	1613.5	1613.1	1611.4	1610.9
25°	1565.5	1564.9	1563.7	1562.6
30°	1505.9	1505.4	1502.6	1502.2
35°	1434.6	1433.3	1429.8	1428.9
40°	1349.4	1347.6	1343.8	1342.5
45°	1251.6	1249.6	1244.3	1243.5
50°	1140.3	1138.2	1132.4	1130.7
55°	1016.5	1013.2	1007.0	1005.1
60°	879.5	876.2	869.3	866.3
65°	733.0	732.5	721.7	722.1
70°	577.8	578.9	566.4	566.9
75°	420.2	419.9	408.5	408.0
80°	265.8	264.8	255.4	253.6
85°	122.7	122.2	113.8	112.9
90°	5.3	15.3	1.4	12.5
95°	0.1	0.1	0.1	0.1
100°	0.2	0.2	0.2	0.2
105°	0.2	0.2	0.2	0.2
110°	0.3	0.3	0.3	0.3
115°	0.4	0.4	0.4	0.4
120°	0.5	0.5	0.5	0.5
125°	0.5	0.5	0.5	0.5
130°	0.5	0.5	0.5	0.5
135°	0.5	0.5	0.6	0.5
140°	0.5	0.5	0.5	0.5
145°	0.4	0.4	0.4	0.4
150°	0.4	0.4	0.4	0.4
155°	0.4	0.4	0.4	0.4
160°	0.4	0.4	0.4	0.4
165°	0.4	0.5	0.4	0.4
170°	0.4	0.4	0.4	0.4
175°	0.5	0.5	0.4	0.4
180°	0.5	0.5	0.5	0.5

(END OF REPORT)