

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: P328422

Luminaire Tested: **24CGT4535C**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P328422
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: 24CGT4535C
Description: 4500 LUMEN, 2X4 CGT LED TROFFER WITH 3500 CCT LEDS

Light Source: -
Ballast/Driver: -

Summary

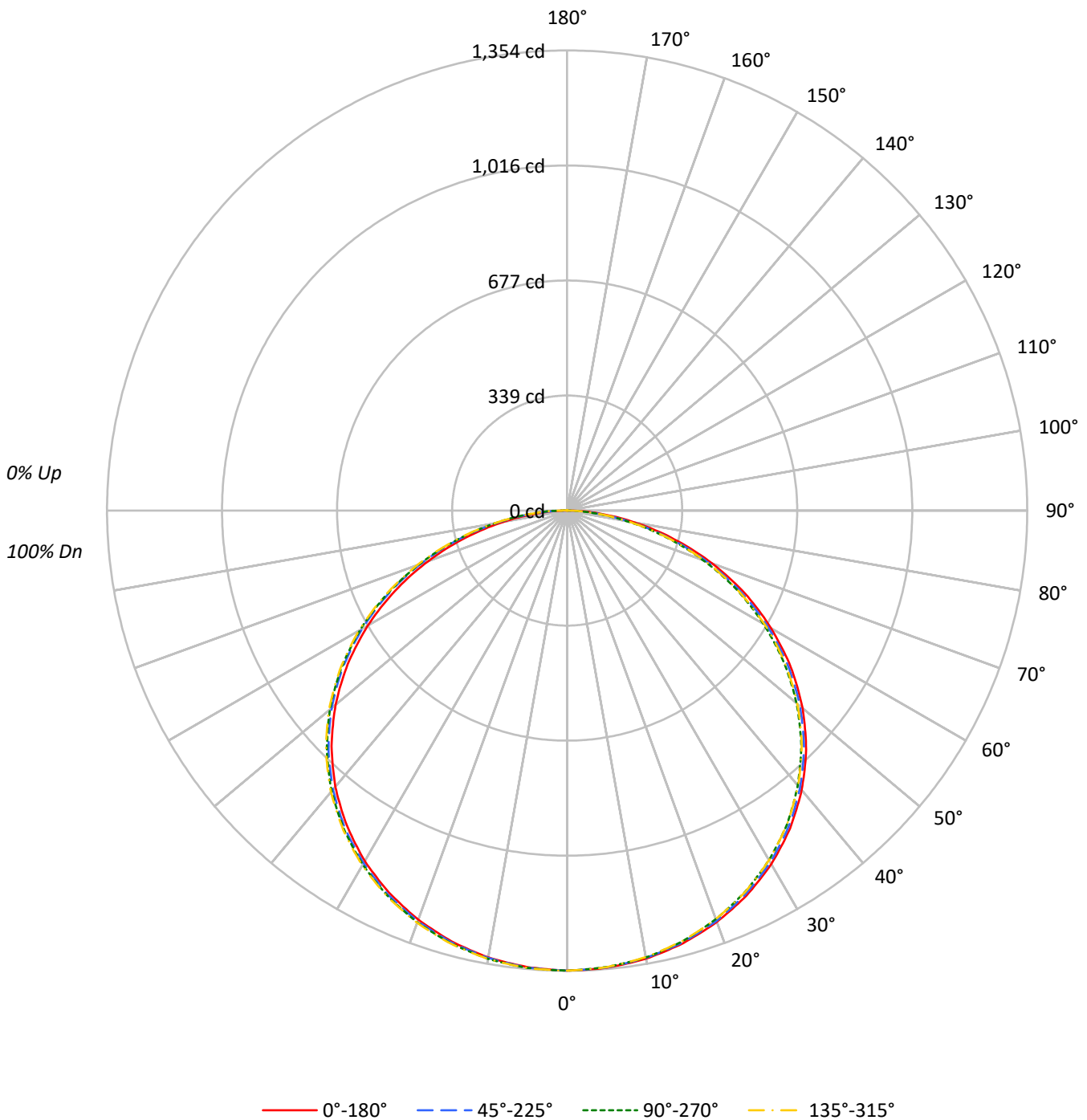
Lumens per Lamp: N/A
Luminaire Lumens: 4268.3 lumens
Efficiency: N/A
Efficacy: 110.0 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.31 / 1.44
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 38.8
Input Voltage (V): NR
Input Current (A_{in}): 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°	1821	1821	1821	1821
5°	1824	1821	1821	1824
10°	1829	1824	1824	1830
15°	1836	1828	1829	1837
20°	1845	1832	1834	1846
25°	1855	1838	1841	1857
30°	1866	1845	1850	1869
35°	1877	1852	1857	1881
40°	1886	1854	1864	1894
45°	1892	1854	1866	1902
50°	1893	1844	1862	1908
55°	1886	1826	1849	1906
60°	1864	1794	1823	1894
65°	1839	1754	1779	1869
70°	1784	1674	1712	1825
75°	1696	1554	1614	1761
80°	1571	1374	1469	1678
85°	1394	1054	1201	1585



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.4	3.0
10°-20°	371.6	8.7
20°-30°	574.4	13.5
30°-40°	711.6	16.7
40°-50°	762.0	17.9
50°-60°	712.0	16.7
60°-70°	563.4	13.2
70°-80°	338.9	7.9
80°-90°	102.1	2.4
90°-100°	2.2	0.1
100°-110°	0.2	0.0
110°-120°	0.3	0.0
120°-130°	0.3	0.0
130°-140°	0.3	0.0
140°-150°	0.2	0.0
150°-160°	0.1	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	1074.4	25.2
0°-40°	1786.0	41.8
0°-60°	3260.0	76.4
0°-90°	4264.5	99.9
90°-120°	2.8	0.1
90°-150°	3.6	0.1
90°-180°	4.0	0.1
0°-180°	4268.3	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1354	1354	1354	1354	1354	
5°	1350	1348	1348	1351	1350	129
15°	1318	1312	1313	1318	1318	372
25°	1250	1238	1240	1251	1250	576
35°	1143	1128	1131	1145	1143	715
45°	994	974	980	1000	994	767
55°	804	778	788	812	804	717
65°	578	551	559	587	578	570
75°	326	299	310	339	326	345
85°	90	68	78	103	90	99
90°	10	0	2	18	10	15
95°	0	0	0	0	0	2
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	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



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	1353.6	1353.6	1353.6	1353.6	1353.6	1353.6	1353.6	1353.6	1353.6	1353.6	1353.6
5°	1350.3	1350.6	1350.6	1349.1	1349.2	1349.1	1349.2	1349.0	1349.4	1347.9	1347.8
10°	1338.9	1338.4	1337.7	1336.8	1336.8	1335.9	1335.8	1334.9	1335.7	1335.2	1334.0
15°	1318.1	1318.1	1317.3	1315.7	1315.4	1314.4	1313.5	1313.0	1313.0	1312.0	1310.8
20°	1288.3	1288.1	1287.4	1285.8	1285.6	1284.0	1283.1	1281.5	1281.0	1279.5	1279.3
25°	1249.7	1248.7	1248.0	1246.3	1245.3	1243.3	1243.5	1241.0	1240.7	1238.3	1237.4
30°	1201.3	1200.0	1199.7	1197.2	1196.6	1194.3	1193.3	1190.7	1189.9	1187.8	1186.7
35°	1142.8	1141.0	1140.8	1137.8	1137.5	1134.5	1133.2	1130.2	1129.6	1127.7	1125.1
40°	1073.6	1072.0	1071.4	1068.8	1067.5	1064.7	1063.0	1059.8	1058.4	1055.6	1054.2
45°	994.5	991.6	991.2	988.1	987.5	983.8	982.2	977.8	976.5	974.3	972.5
50°	904.3	900.7	900.6	897.1	896.4	892.2	890.4	885.8	884.1	881.0	879.9
55°	803.8	800.0	800.1	795.7	794.8	789.8	787.9	782.6	780.9	778.5	777.0
60°	692.8	689.5	688.4	684.4	683.2	678.6	676.2	670.4	668.9	666.8	665.2
65°	577.5	570.1	572.9	564.4	567.2	558.2	559.7	549.4	551.8	550.9	545.5
70°	453.4	445.0	447.1	438.8	441.1	432.2	433.3	424.2	425.9	425.6	420.5
75°	326.3	318.4	319.1	311.6	312.5	304.5	304.7	296.7	297.7	298.9	295.0
80°	202.8	195.8	195.4	188.5	188.5	181.5	181.7	174.7	176.0	177.3	174.2
85°	90.3	83.2	83.0	75.7	76.2	69.5	70.2	64.8	66.2	68.3	64.9
90°	10.0	12.2	0.1	1.2	0.1	0.4	0.1	6.7	0.1	0.2	6.9
95°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
100°	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
105°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2
110°	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2
115°	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3
120°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3
125°	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3
130°	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.3	0.3
135°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.3	0.3
140°	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.3
145°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3
150°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
155°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
160°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
165°	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
170°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
175°	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3
180°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4



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CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	1353.6	1353.6	1353.6	1353.6	1353.6	1353.6	1353.6	1353.6	1353.6	1353.6	1353.6
5°	1347.8	1346.9	1347.7	1348.9	1348.6	1348.6	1347.9	1348.2	1348.6	1348.7	1349.0
10°	1333.7	1333.2	1333.4	1335.0	1334.2	1334.1	1334.4	1335.2	1335.2	1335.8	1336.0
15°	1310.9	1310.2	1310.1	1311.6	1312.2	1311.3	1311.7	1312.7	1314.0	1313.8	1314.9
20°	1278.5	1278.4	1279.1	1279.7	1280.8	1280.3	1280.9	1281.0	1282.6	1283.3	1284.5
25°	1237.4	1237.0	1237.9	1239.0	1239.8	1239.5	1240.3	1240.4	1242.9	1243.5	1245.0
30°	1187.7	1186.5	1187.8	1187.9	1189.7	1188.7	1190.2	1191.0	1193.2	1194.2	1196.3
35°	1126.4	1125.4	1127.2	1128.0	1129.5	1129.5	1130.7	1130.7	1133.9	1135.4	1137.3
40°	1055.4	1054.5	1057.3	1057.0	1058.8	1058.8	1060.8	1061.2	1064.3	1065.9	1069.0
45°	973.2	974.0	975.9	976.3	977.9	978.1	980.5	980.5	984.0	986.1	990.0
50°	881.5	881.9	884.0	884.4	886.8	886.8	888.3	889.5	893.8	896.1	900.2
55°	779.1	779.6	782.7	783.0	785.2	785.1	787.3	788.4	793.1	795.6	800.9
60°	667.5	667.8	671.1	672.0	674.4	673.6	676.8	677.5	682.6	685.5	691.4
65°	552.4	548.5	555.9	552.2	559.1	554.9	562.0	558.7	568.8	568.4	576.8
70°	426.6	423.5	430.4	427.6	434.2	430.4	437.4	435.1	444.6	444.7	454.5
75°	300.0	297.8	303.5	301.2	307.4	305.1	311.5	310.4	318.8	319.4	328.2
80°	178.0	176.2	180.7	179.7	185.0	184.1	189.7	189.6	196.3	197.6	204.9
85°	68.3	65.6	69.6	67.9	73.0	72.4	78.3	77.8	84.8	84.7	91.4
90°	0.2	7.0	0.2	7.4	0.2	1.0	0.2	2.0	0.3	17.9	10.5
95°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.7	0.3
100°	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.5	0.3
105°	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.3
110°	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
115°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
120°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
125°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
130°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
135°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
140°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
145°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
150°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
155°	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
160°	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
165°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
170°	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3
175°	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4
180°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4



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CANDELA DISTRIBUTION (continued):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	1353.6	1353.6	1353.6	1353.6	1353.6	1353.6	1353.6	1353.6	1353.6	1353.6	1353.6
5°	1349.4	1349.7	1349.6	1350.1	1350.0	1350.6	1350.2	1351.0	1350.8	1351.1	1351.2
10°	1336.0	1337.2	1337.2	1338.1	1337.8	1339.5	1339.7	1339.5	1339.5	1339.1	1339.9
15°	1315.2	1316.0	1316.2	1316.9	1317.8	1318.5	1319.3	1319.6	1319.3	1319.6	1320.2
20°	1284.9	1286.2	1287.1	1287.6	1288.0	1289.4	1289.7	1290.2	1290.5	1290.8	1290.9
25°	1245.8	1247.8	1248.0	1249.4	1249.6	1250.7	1251.7	1251.6	1252.3	1252.4	1253.5
30°	1197.0	1198.9	1200.3	1201.0	1201.6	1203.2	1204.4	1204.0	1205.3	1205.2	1206.1
35°	1139.0	1141.5	1142.2	1143.5	1144.0	1145.1	1146.8	1146.5	1148.4	1147.3	1149.2
40°	1070.2	1073.4	1073.8	1076.0	1076.5	1078.3	1079.3	1079.7	1080.8	1080.7	1081.6
45°	991.1	995.0	995.8	998.0	998.1	999.8	1001.9	1001.9	1003.7	1002.2	1003.9
50°	902.9	906.6	907.0	909.6	909.7	911.7	913.5	913.8	915.2	914.9	915.5
55°	803.7	807.6	808.4	811.1	811.8	812.5	815.3	814.7	817.0	815.9	816.9
60°	694.6	699.1	700.0	703.2	703.0	704.0	706.7	706.9	709.2	707.6	708.4
65°	577.5	585.1	583.8	589.4	586.8	587.2	592.5	589.6	595.0	590.6	593.5
70°	454.3	463.2	460.3	467.7	464.0	463.9	470.4	467.0	472.9	467.1	470.9
75°	328.8	337.2	335.6	342.7	339.6	338.7	344.3	341.2	346.1	341.2	344.1
80°	206.2	213.2	213.1	219.1	217.6	216.5	220.8	218.3	221.8	217.4	218.9
85°	92.0	98.9	99.4	105.3	104.6	102.7	106.4	104.0	106.3	102.4	103.7
90°	1.3	12.5	5.6	22.0	19.1	18.0	18.1	18.8	17.7	24.8	13.8
95°	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
100°	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
105°	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
110°	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2
115°	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3
120°	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
125°	0.4	0.4	0.3	0.3	0.3	0.5	0.5	0.4	0.4	0.4	0.4
130°	0.4	0.4	0.3	0.3	0.3	0.5	0.4	0.4	0.4	0.4	0.4
135°	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
140°	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.4
145°	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
150°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
155°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
160°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
165°	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.4	0.4	0.4	0.4
170°	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
175°	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4
180°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4



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 CATALOG NUMBER: 24CGT4535C

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	1353.6	1353.6	1353.6	1353.6
5°	1351.1	1350.5	1350.7	1350.3
10°	1339.8	1339.1	1339.1	1338.9
15°	1318.9	1319.1	1318.0	1318.1
20°	1290.4	1290.1	1288.7	1288.3
25°	1252.0	1251.5	1250.6	1249.7
30°	1204.3	1203.9	1201.7	1201.3
35°	1147.3	1146.3	1143.5	1142.8
40°	1079.2	1077.7	1074.7	1073.6
45°	1001.0	999.4	995.1	994.5
50°	911.9	910.2	905.6	904.3
55°	812.9	810.3	805.4	803.8
60°	703.4	700.7	695.3	692.8
65°	586.2	585.8	577.2	577.5
70°	462.1	463.0	453.0	453.4
75°	336.0	335.8	326.7	326.3
80°	212.6	211.8	204.3	202.8
85°	98.1	97.7	91.0	90.3
90°	4.2	12.2	1.1	10.0
95°	0.1	0.1	0.1	0.1
100°	0.1	0.1	0.1	0.1
105°	0.2	0.2	0.2	0.2
110°	0.2	0.3	0.3	0.3
115°	0.3	0.3	0.4	0.4
120°	0.4	0.4	0.4	0.4
125°	0.4	0.4	0.4	0.4
130°	0.4	0.4	0.4	0.4
135°	0.4	0.4	0.5	0.4
140°	0.4	0.4	0.4	0.4
145°	0.3	0.3	0.3	0.3
150°	0.3	0.3	0.3	0.3
155°	0.3	0.3	0.3	0.3
160°	0.3	0.3	0.3	0.3
165°	0.4	0.4	0.4	0.4
170°	0.4	0.4	0.3	0.3
175°	0.4	0.4	0.4	0.3
180°	0.4	0.4	0.4	0.4

(END OF REPORT)