

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: HALO COMMERCIAL

Report Number: P238362

Luminaire Tested: **PRS640D010-S6M24-61SWWMW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P238362
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-27)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS640D010-S6M24-61SWWMW
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" WALL WASH DISTRIBUTION, WW TRIM MATTE WHITE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2917.6 lumens
Efficiency: N/A
Efficacy: 76.8 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.04 / 1.14
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

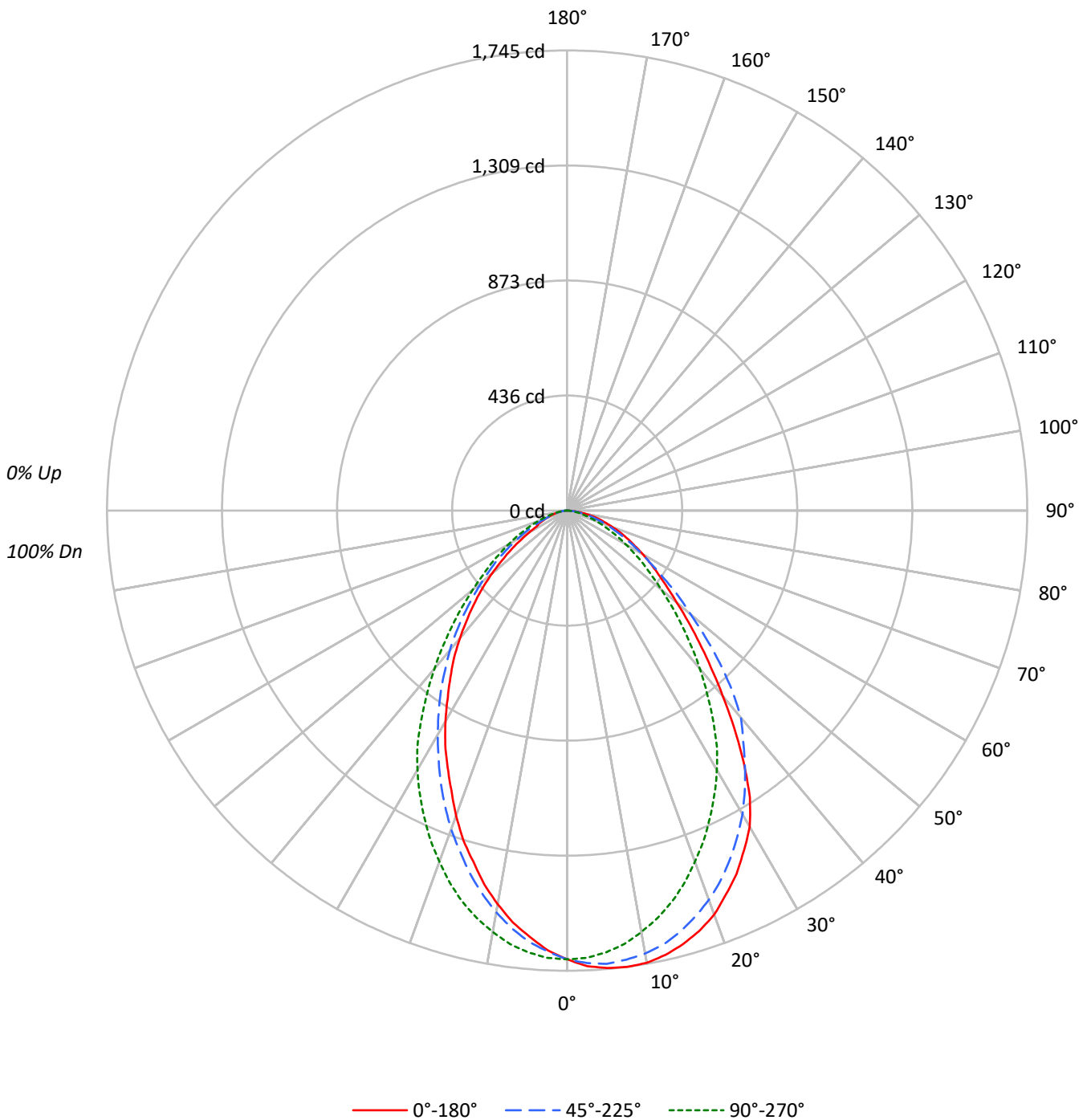
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P238362

CATALOG NUMBER: PRS640D010-S6M24-61SWWMW

Luminous Intensity Polar Plot





TEST NUMBER: P238362

CATALOG NUMBER: PRS640D010-S6M24-61SWWMW

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	111	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77
3	95	86	79	74	93	85	78	73	82	76	72	79	75	71	77	73	70	68
4	88	78	70	65	86	77	70	64	74	68	63	72	67	63	70	66	62	60
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55	53
6	76	65	57	51	75	64	56	51	62	56	51	61	55	50	59	54	50	48
7	71	59	52	46	70	59	51	46	57	51	46	56	50	45	55	49	45	43
8	67	55	47	42	66	54	47	42	53	46	42	52	46	41	51	45	41	39
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	73264	73264	73264
5°	75255	72688	70125
10°	76125	70935	66262
15°	75848	68440	61384
20°	74703	64912	56389
25°	72191	60908	50946
30°	68857	56463	45839
35°	61360	50543	40562
40°	51602	44037	35589
45°	43128	37350	30360
50°	36311	31281	24918
55°	31783	26438	19607
60°	28623	22148	14312
65°	25806	18145	12093
70°	22911	14943	10461
75°	21060	11844	9216
80°	17654	8827	7860
85°	13684	5879	5879



TEST NUMBER: P238362

CATALOG NUMBER: PRS640D010-S6M24-61SWWMW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.8	5.4
10°-20°	432.1	14.8
20°-30°	593.6	20.3
30°-40°	615.1	21.1
40°-50°	496.2	17.0
50°-60°	329.5	11.3
60°-70°	186.1	6.4
70°-80°	85.4	2.9
80°-90°	20.8	0.7
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°	1184.5	40.6
0°-40°	1799.6	61.7
0°-60°	2625.3	90.0
0°-90°	2917.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2917.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1702	1702	1702	1702	1702	
5°	1741	1725	1682	1642	1622	166
15°	1702	1654	1535	1425	1377	479
25°	1520	1460	1282	1136	1072	697
35°	1167	1175	962	835	772	724
45°	708	819	613	550	499	551
55°	423	447	352	317	261	383
65°	253	234	178	142	119	251
75°	127	103	71	51	55	134
85°	28	20	12	16	12	32
90°	0	0	0	0	0	



TEST NUMBER: P238362

CATALOG NUMBER: PRS640D010-S6M24-61SWWMW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6
2.5°	1729.3	1725.4	1725.4	1725.4	1725.4	1725.4	1725.4	1725.4	1721.4	1721.4	1717.4
5°	1741.2	1741.2	1741.2	1741.2	1737.2	1737.2	1737.2	1733.3	1729.3	1725.4	1725.4
7.5°	1745.1	1745.1	1745.1	1741.2	1741.2	1741.2	1737.2	1733.3	1729.3	1725.4	1717.4
10°	1741.2	1741.2	1737.2	1737.2	1733.3	1729.3	1729.3	1725.4	1721.4	1713.5	1705.6
12.5°	1725.4	1725.4	1725.4	1721.4	1717.4	1717.4	1713.5	1705.6	1701.6	1693.7	1685.8
15°	1701.6	1701.6	1701.6	1697.7	1693.7	1689.7	1689.7	1681.8	1673.9	1666.0	1654.1
17.5°	1670.0	1670.0	1670.0	1666.0	1658.1	1658.1	1654.1	1646.2	1638.3	1630.4	1614.6
20°	1630.4	1626.4	1626.4	1622.5	1614.6	1614.6	1610.6	1602.7	1594.8	1582.9	1571.0
22.5°	1575.0	1578.9	1575.0	1571.0	1567.1	1563.1	1559.2	1551.2	1543.3	1531.5	1519.6
25°	1519.6	1515.6	1515.6	1515.6	1511.7	1503.8	1499.8	1495.8	1484.0	1472.1	1460.2
27.5°	1452.3	1444.4	1444.4	1448.4	1444.4	1440.4	1436.5	1428.6	1420.7	1408.8	1396.9
30°	1385.0	1381.1	1381.1	1377.1	1369.2	1365.2	1365.2	1357.3	1353.4	1341.5	1329.6
32.5°	1290.1	1294.0	1298.0	1301.9	1298.0	1298.0	1298.0	1286.1	1274.2	1266.3	1254.4
35°	1167.4	1171.3	1179.3	1187.2	1203.0	1207.0	1210.9	1214.9	1203.0	1191.1	1175.3
37.5°	1040.8	1048.7	1052.6	1064.5	1076.4	1088.2	1092.2	1108.0	1119.9	1115.9	1096.2
40°	918.1	922.0	933.9	937.9	957.7	969.5	977.4	993.3	1017.0	1024.9	1024.9
42.5°	807.3	811.2	815.2	827.1	842.9	858.7	862.7	878.5	906.2	918.1	926.0
45°	708.3	712.3	720.2	724.2	740.0	747.9	755.8	779.6	795.4	815.2	819.1
47.5°	621.3	621.3	625.2	637.1	649.0	656.9	660.9	680.6	696.5	708.3	712.3
50°	542.1	546.1	550.1	554.0	561.9	569.8	577.8	593.6	605.5	613.4	609.4
52.5°	478.8	482.8	482.8	486.7	494.7	502.6	506.5	514.4	522.4	526.3	530.3
55°	423.4	423.4	427.4	431.3	435.3	439.3	439.3	447.2	447.2	451.1	447.2
57.5°	375.9	375.9	375.9	379.9	379.9	383.9	383.9	383.9	383.9	383.9	379.9
60°	332.4	328.5	332.4	332.4	336.4	336.4	336.4	332.4	328.5	328.5	324.5
62.5°	288.9	288.9	288.9	292.8	292.8	288.9	288.9	288.9	281.0	281.0	277.0
65°	253.3	249.3	253.3	253.3	253.3	249.3	249.3	245.3	241.4	237.4	233.5
67.5°	217.6	217.6	217.6	217.6	213.7	213.7	213.7	205.8	201.8	197.9	193.9
70°	182.0	186.0	182.0	182.0	182.0	178.1	178.1	174.1	170.2	166.2	162.2
72.5°	154.3	154.3	154.3	150.4	150.4	146.4	146.4	142.5	138.5	134.5	130.6
75°	126.6	126.6	126.6	122.7	118.7	118.7	118.7	114.8	110.8	106.8	102.9
77.5°	98.9	98.9	95.0	95.0	91.0	91.0	91.0	87.1	83.1	79.1	79.1
80°	71.2	71.2	71.2	71.2	67.3	67.3	67.3	63.3	59.4	59.4	55.4
82.5°	47.5	51.4	47.5	47.5	43.5	43.5	43.5	43.5	39.6	39.6	39.6
85°	27.7	27.7	27.7	27.7	23.7	27.7	23.7	23.7	23.7	23.7	19.8
87.5°	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P238362

CATALOG NUMBER: PRS640D010-S6M24-61SWWMW

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6
2.5°	1717.4	1713.5	1713.5	1709.5	1709.5	1705.6	1705.6	1701.6	1701.6	1697.7	1693.7
5°	1717.4	1713.5	1709.5	1709.5	1705.6	1701.6	1697.7	1693.7	1685.8	1681.8	1677.9
7.5°	1713.5	1709.5	1701.6	1693.7	1689.7	1685.8	1681.8	1673.9	1666.0	1658.1	1650.2
10°	1701.6	1693.7	1681.8	1673.9	1670.0	1662.0	1654.1	1646.2	1634.3	1622.5	1614.6
12.5°	1677.9	1666.0	1654.1	1642.3	1638.3	1630.4	1618.5	1606.6	1594.8	1582.9	1571.0
15°	1642.3	1630.4	1618.5	1606.6	1598.7	1594.8	1578.9	1563.1	1551.2	1535.4	1519.6
17.5°	1602.7	1590.8	1575.0	1559.2	1551.2	1543.3	1531.5	1511.7	1499.8	1480.0	1468.1
20°	1559.2	1543.3	1523.5	1507.7	1499.8	1491.9	1472.1	1456.3	1436.5	1416.7	1404.8
22.5°	1503.8	1484.0	1468.1	1452.3	1440.4	1432.5	1412.7	1392.9	1373.2	1353.4	1333.6
25°	1440.4	1424.6	1404.8	1389.0	1377.1	1365.2	1345.5	1325.7	1301.9	1282.1	1262.4
27.5°	1381.1	1361.3	1341.5	1317.8	1309.8	1294.0	1274.2	1254.4	1230.7	1210.9	1187.2
30°	1309.8	1290.1	1266.3	1246.5	1238.6	1226.7	1203.0	1179.3	1159.5	1135.7	1115.9
32.5°	1238.6	1218.8	1199.0	1175.3	1163.4	1147.6	1123.9	1100.1	1076.4	1056.6	1032.8
35°	1163.4	1143.6	1119.9	1096.2	1080.3	1064.5	1036.8	1009.1	985.4	961.6	949.7
37.5°	1084.3	1060.5	1036.8	1001.2	985.4	969.5	941.8	918.1	894.3	870.6	858.7
40°	997.2	969.5	941.8	910.2	894.3	874.6	850.8	827.1	803.3	783.5	767.7
42.5°	910.2	874.6	846.8	811.2	799.4	783.5	759.8	732.1	712.3	696.5	680.6
45°	811.2	787.5	755.8	724.2	708.3	696.5	672.7	649.0	629.2	613.4	601.5
47.5°	708.3	696.5	664.8	633.2	625.2	609.4	585.7	565.9	550.1	538.2	526.3
50°	613.4	605.5	585.7	554.0	542.1	530.3	510.5	494.7	478.8	467.0	459.0
52.5°	526.3	518.4	506.5	482.8	470.9	459.0	443.2	427.4	415.5	403.6	399.7
55°	447.2	439.3	427.4	411.6	403.6	391.8	379.9	368.0	356.2	352.2	344.3
57.5°	379.9	368.0	360.1	348.2	344.3	336.4	324.5	316.6	308.7	300.8	292.8
60°	320.5	312.6	304.7	296.8	292.8	288.9	277.0	269.1	261.2	257.2	249.3
62.5°	273.0	265.1	257.2	249.3	245.3	241.4	233.5	225.6	217.6	217.6	209.7
65°	229.5	221.6	217.6	209.7	205.8	201.8	193.9	189.9	182.0	178.1	174.1
67.5°	189.9	186.0	182.0	170.2	170.2	166.2	158.3	154.3	150.4	146.4	142.5
70°	154.3	150.4	146.4	142.5	138.5	134.5	130.6	126.6	118.7	118.7	114.8
72.5°	126.6	122.7	114.8	110.8	110.8	106.8	102.9	98.9	95.0	91.0	91.0
75°	98.9	95.0	91.0	87.1	83.1	83.1	79.1	75.2	75.2	71.2	67.3
77.5°	75.2	71.2	67.3	63.3	63.3	59.4	59.4	55.4	55.4	51.4	51.4
80°	51.4	51.4	47.5	47.5	43.5	43.5	39.6	39.6	39.6	35.6	35.6
82.5°	35.6	31.7	31.7	31.7	27.7	27.7	27.7	27.7	23.7	23.7	23.7
85°	19.8	19.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	11.9	11.9
87.5°	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P238362

CATALOG NUMBER: PRS640D010-S6M24-61SWWMW

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6
2.5°	1693.7	1689.7	1685.8	1685.8	1685.8	1681.8	1681.8	1677.9	1673.9	1673.9	1670.0
5°	1670.0	1666.0	1662.0	1658.1	1658.1	1650.2	1650.2	1646.2	1642.3	1638.3	1634.3
7.5°	1642.3	1634.3	1630.4	1622.5	1622.5	1618.5	1606.6	1602.7	1598.7	1590.8	1586.9
10°	1606.6	1594.8	1586.9	1582.9	1575.0	1571.0	1559.2	1555.2	1547.3	1543.3	1535.4
12.5°	1559.2	1547.3	1535.4	1531.5	1527.5	1515.6	1507.7	1495.8	1487.9	1480.0	1472.1
15°	1507.7	1495.8	1480.0	1476.1	1472.1	1456.3	1444.4	1436.5	1424.6	1416.7	1408.8
17.5°	1448.4	1432.5	1416.7	1412.7	1404.8	1389.0	1381.1	1369.2	1353.4	1345.5	1337.5
20°	1385.0	1369.2	1353.4	1349.4	1341.5	1325.7	1309.8	1298.0	1286.1	1278.2	1266.3
22.5°	1313.8	1298.0	1278.2	1270.3	1266.3	1246.5	1234.7	1222.8	1210.9	1195.1	1187.2
25°	1246.5	1226.7	1210.9	1199.0	1191.1	1175.3	1163.4	1143.6	1135.7	1119.9	1112.0
27.5°	1171.3	1151.6	1135.7	1123.9	1115.9	1104.1	1084.3	1068.5	1056.6	1044.7	1036.8
30°	1096.2	1076.4	1060.5	1048.7	1040.8	1024.9	1005.1	997.2	981.4	969.5	957.7
32.5°	1017.0	997.2	977.4	973.5	961.6	945.8	933.9	918.1	906.2	894.3	882.5
35°	926.0	914.1	898.3	894.3	886.4	870.6	858.7	846.8	835.0	819.1	807.3
37.5°	838.9	823.1	815.2	807.3	803.3	795.4	783.5	771.7	759.8	747.9	744.0
40°	751.9	740.0	728.1	728.1	724.2	716.3	708.3	700.4	692.5	680.6	672.7
42.5°	668.8	656.9	652.9	645.0	641.1	637.1	629.2	625.2	621.3	613.4	605.5
45°	589.6	581.7	573.8	569.8	565.9	561.9	561.9	554.0	550.1	546.1	538.2
47.5°	514.4	510.5	506.5	502.6	498.6	498.6	490.7	486.7	482.8	482.8	474.9
50°	451.1	447.2	443.2	439.3	435.3	435.3	431.3	427.4	423.4	419.5	411.6
52.5°	395.7	391.8	383.9	383.9	383.9	379.9	375.9	372.0	368.0	364.1	360.1
55°	340.3	336.4	332.4	332.4	328.5	328.5	324.5	320.5	316.6	312.6	308.7
57.5°	292.8	288.9	284.9	284.9	281.0	281.0	277.0	273.0	265.1	261.2	257.2
60°	249.3	245.3	241.4	241.4	237.4	233.5	233.5	225.6	221.6	217.6	209.7
62.5°	205.8	201.8	201.8	197.9	197.9	197.9	193.9	186.0	182.0	174.1	170.2
65°	170.2	166.2	166.2	162.2	162.2	158.3	154.3	150.4	142.5	138.5	130.6
67.5°	138.5	138.5	134.5	130.6	130.6	126.6	122.7	114.8	110.8	102.9	98.9
70°	110.8	106.8	106.8	102.9	98.9	95.0	91.0	87.1	83.1	83.1	83.1
72.5°	87.1	83.1	83.1	79.1	79.1	71.2	67.3	67.3	67.3	67.3	67.3
75°	67.3	63.3	59.4	59.4	55.4	55.4	51.4	51.4	51.4	51.4	55.4
77.5°	47.5	47.5	43.5	43.5	39.6	39.6	39.6	39.6	39.6	39.6	43.5
80°	35.6	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7
82.5°	23.7	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	23.7
85°	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	15.8	11.9	11.9
87.5°	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P238362

CATALOG NUMBER: PRS640D010-S6M24-61SWWMW

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6
2.5°	1670.0	1670.0	1670.0	1670.0	1670.0	1666.0	1670.0	1670.0
5°	1634.3	1630.4	1630.4	1626.4	1626.4	1626.4	1626.4	1622.5
7.5°	1582.9	1578.9	1578.9	1578.9	1575.0	1575.0	1571.0	1575.0
10°	1527.5	1523.5	1519.6	1523.5	1515.6	1515.6	1515.6	1515.6
12.5°	1468.1	1464.2	1460.2	1456.3	1456.3	1452.3	1452.3	1452.3
15°	1400.9	1396.9	1392.9	1389.0	1389.0	1381.1	1381.1	1377.1
17.5°	1329.6	1325.7	1321.7	1317.8	1309.8	1309.8	1305.9	1309.8
20°	1254.4	1246.5	1242.6	1242.6	1238.6	1234.7	1230.7	1230.7
22.5°	1179.3	1171.3	1171.3	1163.4	1159.5	1155.5	1151.6	1147.6
25°	1100.1	1092.2	1092.2	1084.3	1080.3	1076.4	1076.4	1072.4
27.5°	1024.9	1013.1	1013.1	1009.1	1001.2	997.2	997.2	1001.2
30°	949.7	941.8	937.9	930.0	926.0	922.0	918.1	922.0
32.5°	874.6	862.7	858.7	858.7	854.8	850.8	846.8	842.9
35°	799.4	795.4	787.5	783.5	775.6	775.6	771.7	771.7
37.5°	732.1	720.2	716.3	712.3	708.3	704.4	700.4	704.4
40°	660.9	652.9	645.0	645.0	637.1	633.2	629.2	633.2
42.5°	597.5	589.6	585.7	577.8	569.8	565.9	565.9	561.9
45°	534.2	522.4	522.4	510.5	506.5	502.6	498.6	498.6
47.5°	470.9	463.0	455.1	455.1	443.2	439.3	435.3	435.3
50°	411.6	399.7	395.7	391.8	383.9	375.9	372.0	372.0
52.5°	352.2	344.3	336.4	336.4	328.5	320.5	316.6	312.6
55°	300.8	292.8	288.9	281.0	277.0	265.1	261.2	261.2
57.5°	249.3	241.4	237.4	233.5	225.6	217.6	209.7	209.7
60°	205.8	197.9	197.9	189.9	182.0	174.1	166.2	166.2
62.5°	162.2	154.3	154.3	150.4	142.5	138.5	134.5	130.6
65°	126.6	118.7	118.7	118.7	118.7	118.7	114.8	118.7
67.5°	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
70°	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1
72.5°	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
75°	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4
77.5°	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5
80°	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7
82.5°	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7
85°	11.9	15.8	15.8	15.8	15.8	15.8	11.9	11.9
87.5°	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)