

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: P238376

Luminaire Tested: **PRS630D010-S6M24-61SWWMB**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P238376
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-28)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS630D010-S6M24-61SWWMB
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" WALL WASH DISTRIBUTION, WW TRIM MATTE BLACK
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1862.9 lumens
Efficiency: N/A
Efficacy: 73.1 lumens/watt
Spacing Criteria (0/90/45): 1.03 / 1.02 / 1.12
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

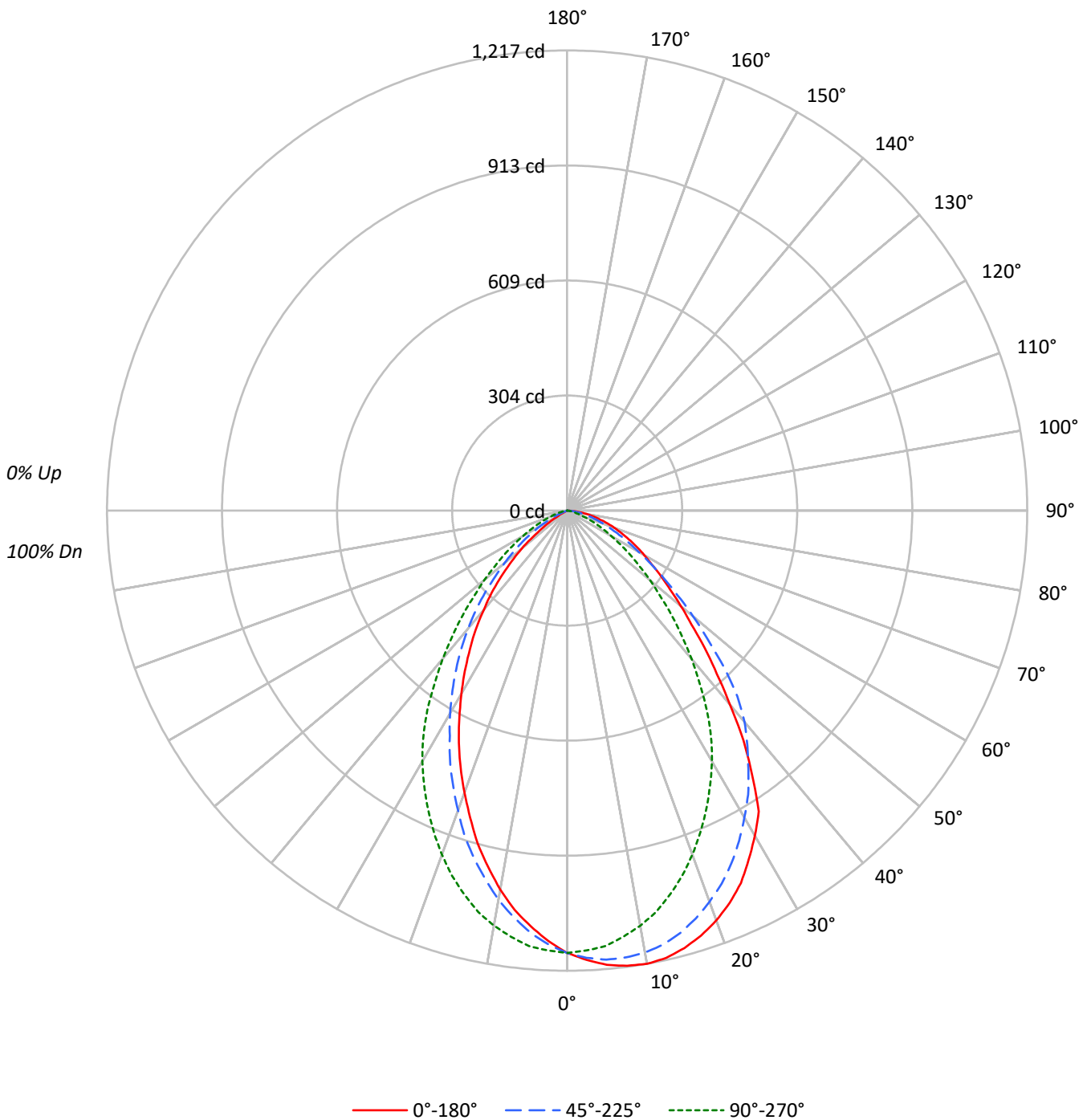
Input Watts (W): 25.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89					89			
2	104	97	92	87	101	95	90	86	92	88	84	89	85	83	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	90	80	72	67	88	78	72	67	76	70	66	74	69	65	72	68	64	62					62			
5	83	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56					56			
6	78	67	59	53	76	66	59	53	64	58	53	62	57	52	61	56	52	50					50			
7	73	61	54	48	71	61	53	48	59	53	48	58	52	48	56	51	47	46					46			
8	68	57	49	44	67	56	49	44	55	48	44	54	48	43	52	47	43	42					42			
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38					38			
10	61	49	42	37	60	48	42	37	47	41	37	47	41	37	46	40	37	35					35			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	50375	50375	50375
5°	52123	49971	47698
10°	53211	48735	44502
15°	53387	46852	40688
20°	52847	44357	36371
25°	51640	41393	32195
30°	49368	38093	27777
35°	44777	33876	23553
40°	37624	28760	19278
45°	31328	23747	14991
50°	26311	19083	10563
55°	22842	15156	5607
60°	20245	11668	1429
65°	18318	8731	0
70°	16718	5917	0
75°	14722	3676	0
80°	13042	2058	0
85°	9584	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.0	5.9
10°-20°	295.5	15.9
20°-30°	402.8	21.6
30°-40°	411.1	22.1
40°-50°	317.8	17.1
50°-60°	191.9	10.3
60°-70°	92.0	4.9
70°-80°	35.6	1.9
80°-90°	7.1	0.4
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°	807.3	43.3
0°-40°	1218.4	65.4
0°-60°	1728.1	92.8
0°-90°	1862.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1862.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1170	1170	1170	1170	1170	
5°	1206	1192	1156	1120	1104	115
15°	1198	1156	1051	952	913	337
25°	1087	1029	871	733	678	498
35°	852	835	644	512	448	529
45°	514	586	390	307	246	399
55°	304	313	202	144	75	274
65°	180	152	86	33	0	180
75°	88	64	22	0	0	96
85°	19	11	0	0	0	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1170.0	1170.0	1170.0	1170.0	1170.0	1170.0	1170.0	1170.0	1170.0	1170.0	1170.0
2.5°	1189.4	1189.4	1189.4	1189.4	1189.4	1189.4	1189.4	1186.6	1186.6	1183.9	1183.9
5°	1206.0	1206.0	1206.0	1203.2	1203.2	1200.5	1200.5	1197.7	1197.7	1192.2	1192.2
7.5°	1214.3	1214.3	1214.3	1211.5	1211.5	1208.8	1208.8	1206.0	1200.5	1197.7	1192.2
10°	1217.1	1217.1	1214.3	1214.3	1208.8	1208.8	1208.8	1203.2	1197.7	1192.2	1186.6
12.5°	1211.5	1208.8	1208.8	1206.0	1203.2	1200.5	1197.7	1194.9	1189.4	1181.1	1175.6
15°	1197.7	1197.7	1197.7	1194.9	1189.4	1186.6	1186.6	1181.1	1172.8	1164.5	1156.2
17.5°	1178.3	1178.3	1178.3	1175.6	1170.0	1167.3	1164.5	1159.0	1150.7	1142.4	1131.3
20°	1153.4	1153.4	1150.7	1147.9	1142.4	1142.4	1139.6	1131.3	1123.0	1111.9	1100.9
22.5°	1123.0	1123.0	1120.2	1117.5	1111.9	1109.2	1106.4	1098.1	1089.8	1078.8	1067.7
25°	1087.0	1084.3	1081.5	1078.8	1076.0	1070.5	1067.7	1062.2	1053.9	1040.0	1029.0
27.5°	1040.0	1040.0	1037.3	1034.5	1031.7	1029.0	1026.2	1017.9	1009.6	995.8	984.7
30°	993.0	993.0	990.2	987.5	984.7	981.9	976.4	968.1	962.6	951.5	937.7
32.5°	943.2	940.4	940.4	940.4	934.9	934.9	929.4	921.1	910.0	901.7	890.7
35°	851.9	854.7	857.5	865.8	868.5	874.1	874.1	871.3	860.2	849.2	835.3
37.5°	766.2	760.7	769.0	774.5	785.6	791.1	793.8	804.9	810.4	796.6	782.8
40°	669.4	674.9	680.4	688.7	699.8	702.6	710.9	719.2	733.0	738.5	730.2
42.5°	586.4	586.4	594.7	603.0	611.3	619.6	627.9	639.0	655.5	663.8	666.6
45°	514.5	511.7	514.5	525.5	536.6	542.1	547.7	561.5	578.1	589.2	586.4
47.5°	445.3	448.1	453.6	459.2	464.7	470.2	475.8	492.4	503.4	506.2	503.4
50°	392.8	390.0	395.5	398.3	406.6	409.4	414.9	423.2	431.5	434.3	434.3
52.5°	343.0	345.8	345.8	348.5	354.1	356.8	359.6	367.9	367.9	370.6	367.9
55°	304.3	301.5	304.3	307.0	309.8	312.6	315.3	315.3	315.3	315.3	312.6
57.5°	265.5	265.5	268.3	268.3	271.1	273.8	273.8	271.1	271.1	265.5	262.8
60°	235.1	235.1	235.1	235.1	237.9	237.9	237.9	232.3	226.8	226.8	218.5
62.5°	207.5	204.7	207.5	207.5	207.5	204.7	201.9	196.4	193.6	188.1	182.6
65°	179.8	179.8	179.8	179.8	177.0	177.0	174.3	168.7	163.2	160.4	152.1
67.5°	154.9	154.9	154.9	154.9	152.1	149.4	146.6	141.1	135.5	132.8	124.5
70°	132.8	130.0	130.0	130.0	127.2	124.5	121.7	118.9	113.4	107.9	102.3
72.5°	110.6	110.6	107.9	107.9	105.1	102.3	99.6	96.8	91.3	85.7	80.2
75°	88.5	88.5	88.5	85.7	83.0	83.0	80.2	74.7	71.9	66.4	63.6
77.5°	71.9	69.2	69.2	66.4	63.6	63.6	60.9	58.1	55.3	52.6	47.0
80°	52.6	52.6	52.6	49.8	47.0	47.0	44.3	41.5	38.7	36.0	33.2
82.5°	36.0	36.0	36.0	33.2	33.2	30.4	30.4	27.7	27.7	24.9	22.1
85°	19.4	19.4	19.4	19.4	19.4	16.6	16.6	16.6	13.8	13.8	11.1
87.5°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	2.8	2.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1170.0	1170.0	1170.0	1170.0	1170.0	1170.0	1170.0	1170.0	1170.0	1170.0	1170.0
2.5°	1181.1	1181.1	1178.3	1175.6	1175.6	1172.8	1170.0	1170.0	1167.3	1164.5	1161.7
5°	1186.6	1183.9	1178.3	1175.6	1172.8	1172.8	1167.3	1161.7	1159.0	1156.2	1150.7
7.5°	1186.6	1181.1	1175.6	1170.0	1167.3	1164.5	1156.2	1150.7	1145.1	1136.8	1131.3
10°	1181.1	1172.8	1164.5	1156.2	1153.4	1147.9	1139.6	1134.1	1123.0	1114.7	1106.4
12.5°	1167.3	1159.0	1147.9	1136.8	1131.3	1125.8	1114.7	1106.4	1095.3	1087.0	1076.0
15°	1147.9	1136.8	1125.8	1114.7	1106.4	1103.6	1089.8	1076.0	1064.9	1051.1	1037.3
17.5°	1120.2	1109.2	1095.3	1084.3	1076.0	1070.5	1053.9	1040.0	1026.2	1012.4	998.5
20°	1089.8	1076.0	1062.2	1045.6	1040.0	1031.7	1015.1	998.5	981.9	968.1	951.5
22.5°	1053.9	1040.0	1023.4	1009.6	998.5	990.2	973.6	954.3	937.7	921.1	904.5
25°	1012.4	998.5	981.9	965.3	954.3	946.0	926.6	907.3	890.7	871.3	854.7
27.5°	970.9	954.3	937.7	915.6	907.3	896.2	876.8	857.5	838.1	818.7	799.4
30°	923.9	904.5	887.9	865.8	857.5	846.4	824.3	804.9	785.6	766.2	744.1
32.5°	874.1	854.7	835.3	816.0	804.9	793.8	774.5	752.4	727.5	708.1	691.5
35°	818.7	802.1	782.8	760.7	746.8	735.8	708.1	686.0	661.1	644.5	625.1
37.5°	769.0	746.8	721.9	694.3	680.4	666.6	639.0	616.8	597.5	575.3	558.7
40°	708.1	683.2	655.5	622.4	614.1	600.2	575.3	550.4	531.1	511.7	495.1
42.5°	641.7	614.1	589.2	561.5	547.7	533.8	508.9	484.1	464.7	448.1	431.5
45°	575.3	550.4	522.8	495.1	481.3	470.2	445.3	423.2	406.6	390.0	376.2
47.5°	500.7	484.1	459.2	434.3	417.7	406.6	387.2	367.9	348.5	331.9	323.6
50°	428.7	417.7	398.3	373.4	362.3	351.3	329.2	312.6	298.7	284.9	273.8
52.5°	362.3	354.1	340.2	318.1	309.8	296.0	279.4	265.5	251.7	240.6	232.3
55°	307.0	296.0	284.9	271.1	260.0	254.5	235.1	224.0	213.0	201.9	193.6
57.5°	254.5	248.9	237.9	226.8	218.5	210.2	196.4	185.3	177.0	166.0	160.4
60°	215.8	204.7	196.4	185.3	179.8	174.3	163.2	152.1	143.8	135.5	130.0
62.5°	177.0	168.7	160.4	149.4	146.6	141.1	132.8	121.7	116.2	107.9	102.3
65°	146.6	138.3	132.8	121.7	118.9	113.4	105.1	96.8	91.3	85.7	80.2
67.5°	118.9	113.4	105.1	96.8	94.0	88.5	80.2	74.7	69.2	63.6	60.9
70°	96.8	91.3	83.0	74.7	71.9	69.2	60.9	58.1	52.6	47.0	44.3
72.5°	77.4	71.9	63.6	58.1	55.3	52.6	47.0	41.5	38.7	33.2	30.4
75°	58.1	52.6	47.0	41.5	38.7	38.7	33.2	30.4	27.7	22.1	19.4
77.5°	44.3	38.7	33.2	30.4	27.7	24.9	22.1	19.4	16.6	13.8	11.1
80°	30.4	27.7	22.1	19.4	19.4	16.6	13.8	13.8	11.1	8.3	5.5
82.5°	19.4	16.6	13.8	11.1	11.1	11.1	8.3	5.5	5.5	5.5	2.8
85°	8.3	8.3	5.5	5.5	5.5	5.5	2.8	2.8	2.8	0.0	0.0
87.5°	2.8	2.8	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1170.0	1170.0	1170.0	1170.0	1170.0	1170.0	1170.0	1170.0	1170.0	1170.0	1170.0
2.5°	1161.7	1159.0	1156.2	1156.2	1153.4	1153.4	1150.7	1150.7	1147.9	1147.9	1145.1
5°	1145.1	1142.4	1136.8	1136.8	1134.1	1131.3	1125.8	1123.0	1120.2	1117.5	1114.7
7.5°	1125.8	1117.5	1111.9	1109.2	1106.4	1100.9	1095.3	1089.8	1084.3	1081.5	1076.0
10°	1095.3	1087.0	1081.5	1078.8	1073.2	1064.9	1059.4	1051.1	1045.6	1040.0	1034.5
12.5°	1064.9	1053.9	1042.8	1040.0	1034.5	1023.4	1017.9	1006.8	998.5	993.0	987.5
15°	1026.2	1015.1	1001.3	995.8	993.0	979.2	970.9	962.6	951.5	943.2	937.7
17.5°	981.9	970.9	957.0	948.7	943.2	932.2	918.3	910.0	901.7	887.9	882.4
20°	937.7	921.1	907.3	901.7	893.4	879.6	868.5	857.5	843.6	835.3	824.3
22.5°	885.1	871.3	854.7	846.4	840.9	824.3	813.2	799.4	788.3	780.0	766.2
25°	838.1	818.7	802.1	793.8	785.6	771.7	755.1	744.1	733.0	721.9	710.9
27.5°	782.8	763.4	746.8	741.3	733.0	713.6	702.6	686.0	672.1	663.8	652.8
30°	727.5	708.1	691.5	683.2	674.9	658.3	644.5	630.7	619.6	608.5	597.5
32.5°	672.1	655.5	639.0	630.7	622.4	605.8	591.9	575.3	564.3	550.4	539.4
35°	608.5	591.9	578.1	569.8	564.3	550.4	536.6	522.8	511.7	497.9	486.8
37.5°	542.1	525.5	517.2	508.9	503.4	492.4	481.3	470.2	459.2	448.1	434.3
40°	478.5	470.2	453.6	450.9	445.3	434.3	426.0	414.9	406.6	395.5	384.5
42.5°	420.4	406.6	395.5	392.8	387.2	378.9	370.6	362.3	356.8	345.8	337.5
45°	365.1	354.1	343.0	337.5	334.7	326.4	318.1	312.6	307.0	298.7	290.4
47.5°	312.6	301.5	293.2	290.4	284.9	279.4	271.1	265.5	257.2	251.7	243.4
50°	265.5	257.2	248.9	246.2	240.6	237.9	229.6	224.0	215.8	207.5	201.9
52.5°	224.0	215.8	210.2	207.5	204.7	196.4	190.9	185.3	177.0	171.5	163.2
55°	185.3	179.8	174.3	171.5	168.7	163.2	157.7	149.4	143.8	135.5	127.2
57.5°	152.1	146.6	141.1	138.3	135.5	130.0	124.5	118.9	110.6	102.3	94.0
60°	121.7	118.9	113.4	110.6	107.9	102.3	96.8	88.5	83.0	71.9	66.4
62.5°	96.8	94.0	88.5	85.7	83.0	74.7	69.2	63.6	55.3	47.0	38.7
65°	74.7	69.2	63.6	63.6	60.9	55.3	47.0	38.7	33.2	24.9	16.6
67.5°	55.3	49.8	44.3	44.3	41.5	36.0	27.7	22.1	13.8	8.3	0.0
70°	38.7	36.0	30.4	27.7	24.9	19.4	13.8	8.3	2.8	0.0	0.0
72.5°	27.7	22.1	19.4	16.6	13.8	8.3	2.8	0.0	0.0	0.0	0.0
75°	16.6	13.8	8.3	8.3	5.5	2.8	0.0	0.0	0.0	0.0	0.0
77.5°	8.3	8.3	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	5.5	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P238376

CATALOG NUMBER: PRS630D010-S6M24-61SWWMB

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1170.0	1170.0	1170.0	1170.0	1170.0	1170.0	1170.0	1170.0
2.5°	1145.1	1142.4	1142.4	1142.4	1142.4	1142.4	1139.6	1139.6
5°	1111.9	1109.2	1109.2	1106.4	1106.4	1106.4	1103.6	1103.6
7.5°	1073.2	1070.5	1067.7	1067.7	1064.9	1064.9	1062.2	1064.9
10°	1029.0	1023.4	1023.4	1023.4	1020.7	1017.9	1017.9	1017.9
12.5°	981.9	976.4	973.6	970.9	968.1	968.1	965.3	965.3
15°	929.4	923.9	921.1	918.3	915.6	912.8	910.0	912.8
17.5°	874.1	868.5	865.8	863.0	857.5	857.5	854.7	851.9
20°	816.0	810.4	807.7	804.9	802.1	799.4	796.6	793.8
22.5°	757.9	755.1	746.8	746.8	741.3	738.5	735.8	735.8
25°	699.8	694.3	691.5	686.0	680.4	677.7	677.7	677.7
27.5°	641.7	636.2	630.7	627.9	625.1	622.4	616.8	616.8
30°	586.4	578.1	572.6	572.6	567.0	561.5	561.5	558.7
32.5°	531.1	522.8	517.2	514.5	511.7	506.2	503.4	503.4
35°	475.8	467.5	464.7	459.2	453.6	453.6	445.3	448.1
37.5°	426.0	414.9	412.1	409.4	401.1	398.3	395.5	398.3
40°	373.4	365.1	359.6	356.8	351.3	345.8	343.0	343.0
42.5°	323.6	318.1	312.6	309.8	301.5	296.0	293.2	296.0
45°	279.4	271.1	268.3	262.8	254.5	248.9	246.2	246.2
47.5°	235.1	229.6	221.3	218.5	210.2	204.7	199.2	199.2
50°	193.6	185.3	179.8	174.3	168.7	160.4	154.9	157.7
52.5°	154.9	143.8	141.1	135.5	127.2	118.9	113.4	113.4
55°	118.9	110.6	105.1	102.3	91.3	83.0	77.4	74.7
57.5°	85.7	77.4	74.7	69.2	60.9	52.6	44.3	44.3
60°	58.1	49.8	44.3	41.5	33.2	27.7	19.4	16.6
62.5°	30.4	24.9	19.4	16.6	11.1	5.5	5.5	2.8
65°	8.3	2.8	2.8	2.8	2.8	2.8	2.8	0.0
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)