

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: P238330

Luminaire Tested: **PRS620D010-S6M12-61SWWC**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P238330
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-25)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS620D010-S6M12-61SWWC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" WALL WASH DISTRIBUTION, WW TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1602.0 lumens
Efficiency: N/A
Efficacy: 80.1 lumens/watt
Spacing Criteria (0/90/45): 0.98 / 0.94 / 1.03
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

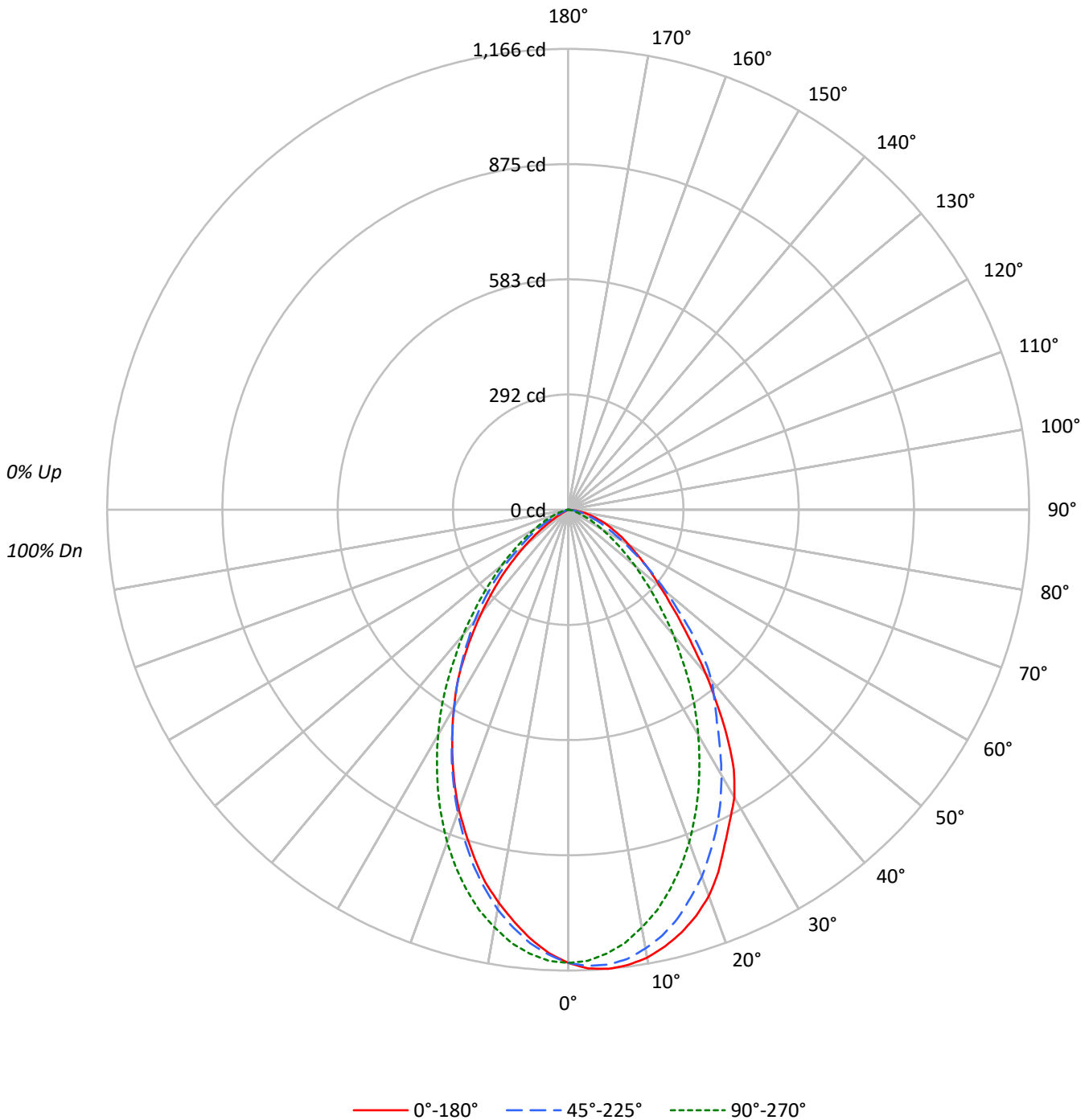
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90					90			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80					80			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	74	80	76	73	71					71			
4	91	81	74	69	89	80	73	68	78	72	67	75	71	67	73	69	66	64					64			
5	85	74	67	62	83	73	66	61	71	65	61	69	64	60	68	63	60	58					58			
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52					52			
7	74	63	56	50	73	62	55	50	61	55	50	60	54	50	58	53	49	48					48			
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44					44			
9	66	54	47	42	65	54	47	42	53	47	42	52	46	42	51	46	42	40					40			
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	48	42	39	37					37			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	49368	49368	49368
5°	50399	48709	47114
10°	50317	46903	44148
15°	49366	44334	40750
20°	47661	40994	37012
25°	44461	37036	32908
30°	41782	32713	28716
35°	36866	28078	24199
40°	30390	23314	19160
45°	24593	18644	14413
50°	20363	14689	9599
55°	17445	11245	5217
60°	15147	8413	1498
65°	13499	6194	0
70°	12299	4104	0
75°	10480	2529	0
80°	9149	1612	0
85°	6422	1087	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.0	6.6
10°-20°	280.2	17.5
20°-30°	364.0	22.7
30°-40°	349.8	21.8
40°-50°	257.5	16.1
50°-60°	147.8	9.2
60°-70°	67.0	4.2
70°-80°	25.0	1.6
80°-90°	4.8	0.3
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°	750.2	46.8
0°-40°	1100.0	68.7
0°-60°	1505.3	94.0
0°-90°	1602.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1602.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1147	1147	1147	1147	1147	
5°	1166	1155	1127	1101	1090	111
15°	1108	1071	995	929	914	311
25°	936	888	780	697	693	432
35°	701	656	534	467	460	434
45°	404	443	306	274	237	315
55°	232	228	150	122	70	210
65°	132	106	61	26	0	133
75°	63	43	15	0	0	68
85°	13	6	2	0	0	16
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°	1146.6	1146.6	1146.6	1146.6	1146.6	1146.6	1146.6	1146.6	1146.6	1146.6	1146.6
2.5°	1161.8	1161.8	1161.8	1159.6	1159.6	1161.8	1159.6	1159.6	1157.4	1157.4	1155.3
5°	1166.1	1166.1	1166.1	1166.1	1164.0	1164.0	1164.0	1161.8	1159.6	1157.4	1155.3
7.5°	1161.8	1161.8	1161.8	1161.8	1159.6	1159.6	1157.4	1155.3	1153.1	1148.8	1146.6
10°	1150.9	1150.9	1150.9	1148.8	1146.6	1144.4	1144.4	1140.1	1135.7	1131.4	1127.0
12.5°	1131.4	1131.4	1129.2	1129.2	1124.9	1124.9	1122.7	1118.4	1114.0	1109.7	1103.2
15°	1107.5	1105.3	1105.3	1103.2	1098.8	1096.6	1094.5	1088.0	1081.4	1074.9	1070.6
17.5°	1077.1	1074.9	1072.8	1070.6	1064.1	1059.7	1057.5	1051.0	1044.5	1038.0	1029.3
20°	1040.2	1038.0	1035.8	1031.5	1027.1	1022.8	1018.5	1011.9	1003.3	994.6	988.1
22.5°	992.4	990.2	988.1	985.9	979.4	975.0	972.9	966.3	957.7	949.0	938.1
25°	935.9	935.9	938.1	931.6	927.3	922.9	922.9	916.4	907.7	896.9	888.2
27.5°	886.0	886.0	881.7	877.3	870.8	866.5	864.3	857.8	853.4	844.7	833.9
30°	840.4	838.2	833.9	829.5	823.0	816.5	810.0	801.3	792.6	783.9	775.2
32.5°	779.6	777.4	777.4	777.4	770.9	768.7	764.4	753.5	742.7	727.5	714.4
35°	701.4	699.2	697.1	699.2	703.6	705.8	707.9	703.6	692.7	675.4	655.8
37.5°	616.7	618.9	621.1	623.2	629.8	634.1	631.9	640.6	638.4	627.6	608.0
40°	540.7	540.7	542.9	549.4	555.9	558.1	560.3	568.9	568.9	571.1	564.6
42.5°	464.7	471.2	473.4	477.7	484.3	488.6	492.9	501.6	503.8	512.5	508.1
45°	403.9	408.3	412.6	416.9	423.5	427.8	430.0	436.5	443.0	447.3	443.0
47.5°	349.6	351.8	354.0	358.3	364.8	367.0	371.3	377.9	384.4	382.2	377.9
50°	304.0	306.2	306.2	312.7	317.0	319.2	319.2	327.9	327.9	327.9	323.6
52.5°	267.1	267.1	269.3	271.4	275.8	275.8	280.1	284.5	280.1	278.0	273.6
55°	232.4	232.4	234.5	236.7	236.7	238.9	241.0	241.0	236.7	232.4	228.0
57.5°	202.0	204.1	204.1	206.3	208.5	206.3	208.5	204.1	199.8	195.4	188.9
60°	175.9	178.1	178.1	180.2	180.2	180.2	178.1	173.7	167.2	162.9	156.4
62.5°	154.2	154.2	154.2	154.2	154.2	154.2	152.0	147.7	141.2	136.8	130.3
65°	132.5	132.5	132.5	132.5	130.3	130.3	128.1	123.8	117.3	112.9	106.4
67.5°	112.9	112.9	112.9	112.9	110.7	108.6	106.4	104.2	97.7	93.4	89.0
70°	97.7	95.5	95.5	93.4	91.2	89.0	89.0	84.7	80.3	76.0	71.7
72.5°	78.2	78.2	78.2	78.2	73.8	73.8	71.7	67.3	63.0	60.8	56.5
75°	63.0	63.0	63.0	60.8	58.6	58.6	56.5	54.3	49.9	47.8	43.4
77.5°	49.9	49.9	49.9	47.8	45.6	43.4	43.4	41.3	36.9	34.7	32.6
80°	36.9	36.9	34.7	32.6	32.6	30.4	30.4	28.2	26.1	23.9	21.7
82.5°	23.9	23.9	23.9	21.7	21.7	19.5	19.5	19.5	17.4	15.2	13.0
85°	13.0	13.0	13.0	10.9	10.9	10.9	10.9	10.9	8.7	8.7	6.5
87.5°	2.2	2.2	2.2	2.2	2.2	4.3	2.2	2.2	2.2	2.2	2.2
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°	1146.6	1146.6	1146.6	1146.6	1146.6	1146.6	1146.6	1146.6	1146.6	1146.6	1146.6
2.5°	1155.3	1153.1	1150.9	1150.9	1148.8	1148.8	1146.6	1144.4	1142.2	1142.2	1140.1
5°	1153.1	1150.9	1146.6	1144.4	1142.2	1140.1	1137.9	1133.6	1131.4	1127.0	1124.9
7.5°	1142.2	1137.9	1133.6	1129.2	1127.0	1124.9	1118.4	1114.0	1109.7	1105.3	1101.0
10°	1122.7	1118.4	1111.8	1107.5	1103.2	1098.8	1094.5	1085.8	1079.3	1072.8	1066.2
12.5°	1096.6	1090.1	1083.6	1074.9	1072.8	1068.4	1061.9	1053.2	1046.7	1038.0	1029.3
15°	1064.1	1053.2	1048.9	1038.0	1033.7	1029.3	1022.8	1014.1	1005.4	994.6	985.9
17.5°	1020.6	1009.8	1005.4	994.6	990.2	985.9	975.0	966.3	957.7	946.8	935.9
20°	977.2	968.5	957.7	946.8	942.5	938.1	925.1	916.4	907.7	894.7	886.0
22.5°	927.3	916.4	905.5	896.9	890.3	886.0	875.1	864.3	851.3	838.2	827.4
25°	877.3	864.3	853.4	842.6	833.9	829.5	816.5	803.5	790.4	779.6	766.6
27.5°	820.8	810.0	797.0	781.8	775.2	768.7	755.7	740.5	729.6	718.8	705.8
30°	762.2	751.4	736.2	723.1	716.6	710.1	697.1	684.0	673.2	658.0	645.0
32.5°	703.6	692.7	679.7	666.7	662.3	653.6	638.4	627.6	612.4	597.2	586.3
35°	647.1	638.4	625.4	610.2	599.4	590.7	575.5	558.1	545.1	534.2	523.3
37.5°	595.0	582.0	564.6	545.1	534.2	525.5	506.0	492.9	482.1	469.1	464.7
40°	540.7	519.0	499.5	479.9	471.2	460.4	445.2	432.1	423.5	414.8	403.9
42.5°	488.6	460.4	438.7	421.3	410.4	403.9	386.5	377.9	367.0	356.1	351.8
45°	430.0	408.3	382.2	364.8	356.1	349.6	334.4	323.6	312.7	306.2	299.7
47.5°	371.3	354.0	330.1	310.5	304.0	297.5	286.6	273.6	264.9	258.4	251.9
50°	312.7	299.7	286.6	264.9	258.4	256.2	243.2	232.4	223.7	219.3	212.8
52.5°	264.9	254.1	241.0	225.8	219.3	212.8	204.1	193.3	188.9	182.4	178.1
55°	219.3	208.5	202.0	191.1	182.4	178.1	169.4	162.9	156.4	149.8	145.5
57.5°	180.2	173.7	167.2	158.5	154.2	149.8	141.2	134.6	128.1	121.6	117.3
60°	149.8	143.3	136.8	130.3	126.0	123.8	115.1	108.6	102.1	97.7	93.4
62.5°	123.8	119.4	112.9	106.4	102.1	99.9	93.4	86.9	80.3	78.2	73.8
65°	102.1	97.7	91.2	84.7	84.7	80.3	73.8	69.5	65.1	60.8	56.5
67.5°	84.7	78.2	73.8	69.5	65.1	63.0	58.6	54.3	49.9	45.6	43.4
70°	67.3	63.0	58.6	52.1	49.9	47.8	43.4	39.1	36.9	32.6	30.4
72.5°	52.1	47.8	43.4	39.1	36.9	34.7	32.6	28.2	26.1	23.9	21.7
75°	41.3	36.9	32.6	28.2	28.2	26.1	23.9	19.5	17.4	15.2	15.2
77.5°	28.2	26.1	23.9	19.5	19.5	17.4	15.2	13.0	13.0	10.9	8.7
80°	19.5	17.4	15.2	13.0	10.9	10.9	8.7	8.7	6.5	6.5	4.3
82.5°	13.0	10.9	8.7	6.5	6.5	6.5	4.3	4.3	4.3	2.2	2.2
85°	6.5	4.3	4.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
87.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
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°	1146.6	1146.6	1146.6	1146.6	1146.6	1146.6	1146.6	1146.6	1146.6	1146.6	1146.6
2.5°	1137.9	1135.7	1133.6	1133.6	1133.6	1131.4	1129.2	1127.0	1127.0	1124.9	1124.9
5°	1120.5	1116.2	1114.0	1111.8	1111.8	1107.5	1105.3	1103.2	1101.0	1098.8	1096.6
7.5°	1094.5	1090.1	1085.8	1081.4	1081.4	1077.1	1072.8	1070.6	1066.2	1064.1	1061.9
10°	1061.9	1057.5	1051.0	1046.7	1042.3	1040.2	1033.7	1029.3	1027.1	1020.6	1018.5
12.5°	1020.6	1014.1	1007.6	1003.3	1001.1	994.6	988.1	985.9	979.4	975.0	972.9
15°	977.2	968.5	959.8	957.7	953.3	946.8	940.3	933.8	929.4	922.9	922.9
17.5°	927.3	916.4	909.9	903.4	901.2	892.5	883.8	879.5	873.0	868.6	866.5
20°	873.0	862.1	853.4	849.1	842.6	836.1	827.4	823.0	816.5	812.2	810.0
22.5°	814.3	801.3	792.6	788.3	783.9	773.1	766.6	762.2	755.7	751.4	749.2
25°	753.5	744.8	734.0	727.5	723.1	712.3	705.8	701.4	697.1	692.7	690.6
27.5°	692.7	679.7	668.8	664.5	660.2	653.6	642.8	636.3	634.1	631.9	629.8
30°	631.9	621.1	610.2	603.7	597.2	590.7	584.1	577.6	575.5	571.1	566.8
32.5°	575.5	564.6	553.7	549.4	545.1	534.2	527.7	523.3	521.2	512.5	510.3
35°	516.8	508.1	501.6	497.3	495.1	486.4	482.1	471.2	466.9	462.5	460.4
37.5°	456.0	447.3	440.8	440.8	436.5	432.1	427.8	423.5	414.8	412.6	410.4
40°	397.4	390.9	386.5	382.2	382.2	380.0	375.7	375.7	369.2	364.8	358.3
42.5°	343.1	338.8	334.4	334.4	332.2	330.1	325.7	325.7	321.4	317.0	310.5
45°	293.2	286.6	284.5	284.5	282.3	280.1	278.0	278.0	273.6	269.3	264.9
47.5°	247.6	243.2	241.0	238.9	236.7	236.7	234.5	232.4	230.2	225.8	221.5
50°	208.5	204.1	202.0	199.8	199.8	197.6	195.4	191.1	191.1	184.6	180.2
52.5°	173.7	171.6	167.2	165.0	162.9	160.7	158.5	156.4	152.0	147.7	145.5
55°	141.2	136.8	134.6	132.5	130.3	128.1	126.0	123.8	121.6	115.1	110.7
57.5°	112.9	108.6	106.4	106.4	104.2	99.9	97.7	95.5	91.2	86.9	80.3
60°	89.0	86.9	82.5	82.5	80.3	76.0	73.8	69.5	65.1	58.6	54.3
62.5°	69.5	67.3	63.0	60.8	60.8	56.5	52.1	47.8	43.4	39.1	32.6
65°	52.1	49.9	47.8	45.6	43.4	39.1	34.7	30.4	26.1	19.5	13.0
67.5°	39.1	36.9	32.6	32.6	30.4	26.1	21.7	17.4	10.9	6.5	2.2
70°	28.2	26.1	21.7	19.5	19.5	15.2	10.9	6.5	0.0	0.0	0.0
72.5°	19.5	17.4	13.0	10.9	10.9	6.5	2.2	0.0	0.0	0.0	0.0
75°	13.0	10.9	6.5	6.5	4.3	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	6.5	4.3	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	2.2	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°	2.2	0.0	0.0	0.0	2.2	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: P238330

CATALOG NUMBER: PRS620D010-S6M12-61SWWC

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1146.6	1146.6	1146.6	1146.6	1146.6	1146.6	1146.6	1146.6
2.5°	1124.9	1122.7	1122.7	1122.7	1120.5	1122.7	1122.7	1122.7
5°	1094.5	1094.5	1092.3	1092.3	1092.3	1090.1	1090.1	1090.1
7.5°	1057.5	1057.5	1055.4	1055.4	1055.4	1053.2	1051.0	1051.0
10°	1016.3	1016.3	1014.1	1014.1	1014.1	1011.9	1009.8	1009.8
12.5°	968.5	968.5	968.5	966.3	966.3	966.3	964.2	966.3
15°	920.7	918.6	918.6	916.4	914.2	914.2	914.2	914.2
17.5°	864.3	862.1	862.1	859.9	862.1	859.9	859.9	859.9
20°	805.6	805.6	805.6	805.6	805.6	805.6	807.8	807.8
22.5°	749.2	747.0	749.2	747.0	747.0	749.2	749.2	751.4
25°	690.6	688.4	688.4	690.6	690.6	690.6	692.7	692.7
27.5°	625.4	629.8	629.8	631.9	631.9	634.1	636.3	634.1
30°	568.9	568.9	568.9	571.1	573.3	575.5	577.6	577.6
32.5°	508.1	510.3	512.5	510.3	512.5	516.8	521.2	523.3
35°	458.2	453.9	451.7	451.7	453.9	456.0	458.2	460.4
37.5°	403.9	401.7	399.6	395.2	397.4	399.6	399.6	399.6
40°	354.0	349.6	347.4	345.3	343.1	340.9	340.9	340.9
42.5°	306.2	301.8	297.5	297.5	291.0	288.8	288.8	286.6
45°	260.6	256.2	251.9	251.9	245.4	238.9	236.7	236.7
47.5°	217.2	210.6	208.5	206.3	199.8	193.3	188.9	186.8
50°	175.9	169.4	167.2	165.0	158.5	149.8	145.5	143.3
52.5°	139.0	132.5	128.1	126.0	117.3	110.7	106.4	104.2
55°	104.2	99.9	95.5	93.4	84.7	76.0	69.5	69.5
57.5°	76.0	67.3	65.1	63.0	54.3	47.8	41.3	39.1
60°	49.9	41.3	39.1	36.9	28.2	21.7	19.5	17.4
62.5°	26.1	19.5	17.4	15.2	10.9	6.5	4.3	4.3
65°	8.7	2.2	2.2	0.0	0.0	0.0	0.0	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)