

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: P238350

Luminaire Tested: **PRS620D010-S6M12-61SWWH-4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P238350
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-26)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS620D010-S6M12-61SWWH-4000K
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" WALL WASH DISTRIBUTION, WW TRIM HAZE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1558.4 lumens
Efficiency: N/A
Efficacy: 77.9 lumens/watt
Spacing Criteria (0/90/45): 1.01 / 0.98 / 1.08
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

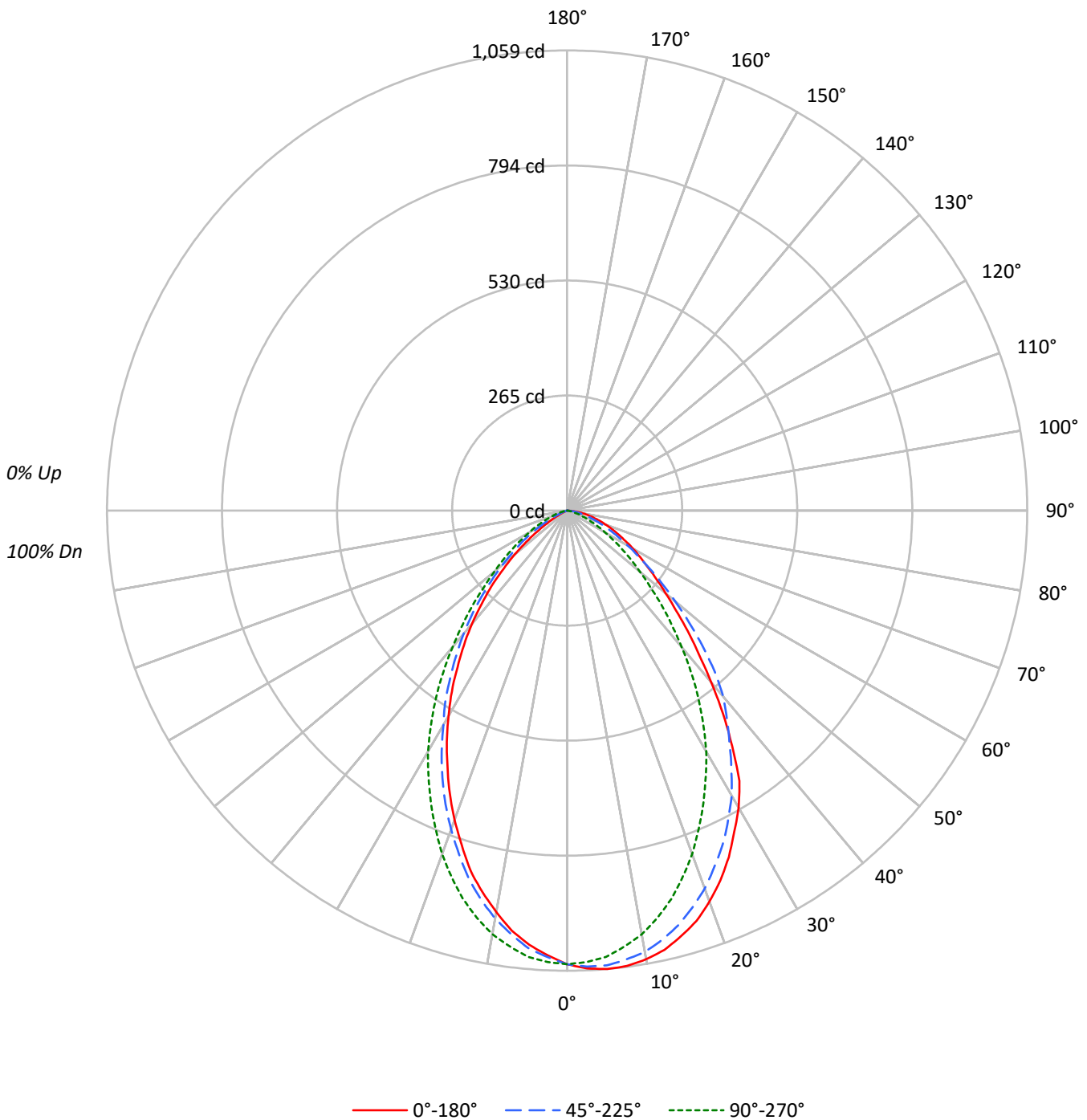
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	102	99	97	98	96	94	94	93	92	90					90			
2	104	98	92	88	102	96	91	87	93	89	85	89	86	83	87	84	81	80					80			
3	97	88	82	77	95	87	81	76	84	79	75	82	77	74	79	76	73	71					71			
4	90	81	73	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63					63			
5	84	74	66	61	82	73	66	60	71	64	60	69	63	59	67	62	59	57					57			
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51					51			
7	74	62	55	50	72	61	54	49	60	54	49	59	53	49	57	52	48	47					47			
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43					43			
9	65	54	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39					39			
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36					36			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	44950	44950	44950
5°	45774	44564	43354
10°	45836	43287	41022
15°	45190	41249	38267
20°	43885	38547	34694
25°	41811	35255	30951
30°	39251	31853	27135
35°	34806	27663	23132
40°	28979	23039	19155
45°	23905	18651	14973
50°	19793	14596	10550
55°	17002	11500	6313
60°	15044	8732	2790
65°	13183	6378	876
70°	11947	4343	541
75°	10414	2878	366
80°	9100	1612	0
85°	6373	1087	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.1	6.2
10°-20°	260.7	16.7
20°-30°	347.6	22.3
30°-40°	343.1	22.0
40°-50°	257.3	16.5
50°-60°	151.0	9.7
60°-70°	70.3	4.5
70°-80°	26.4	1.7
80°-90°	5.0	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°	705.4	45.3
0°-40°	1048.5	67.3
0°-60°	1456.7	93.5
0°-90°	1558.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1558.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1044	1044	1044	1044	1044	
5°	1059	1050	1031	1012	1003	101
15°	1014	988	925	876	858	285
25°	880	848	742	680	652	404
35°	662	652	526	468	440	411
45°	393	440	306	276	246	305
55°	226	231	153	127	84	205
65°	129	112	63	30	9	130
75°	63	45	17	2	2	67
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°	1044.0	1044.0	1044.0	1044.0	1044.0	1044.0	1044.0	1044.0	1044.0	1044.0	1044.0
2.5°	1054.8	1054.8	1054.8	1054.8	1052.7	1052.7	1052.7	1052.7	1052.7	1050.5	1050.5
5°	1059.1	1059.1	1057.0	1057.0	1057.0	1057.0	1054.8	1054.8	1052.7	1052.7	1050.5
7.5°	1057.0	1054.8	1054.8	1054.8	1052.7	1052.7	1052.7	1050.5	1048.4	1046.2	1041.9
10°	1048.4	1048.4	1048.4	1046.2	1044.0	1044.0	1044.0	1039.7	1037.6	1033.3	1031.1
12.5°	1035.4	1033.3	1033.3	1031.1	1028.9	1028.9	1026.8	1022.5	1020.3	1016.0	1011.7
15°	1013.8	1013.8	1013.8	1011.7	1009.5	1007.4	1005.2	1003.1	998.7	994.4	988.0
17.5°	990.1	988.0	988.0	985.8	981.5	981.5	979.3	975.0	970.7	966.4	957.8
20°	957.8	957.8	957.8	955.6	953.4	949.1	949.1	942.7	938.3	931.9	925.4
22.5°	921.1	921.1	921.1	918.9	916.8	914.6	912.5	908.1	901.7	895.2	886.6
25°	880.1	877.9	877.9	877.9	875.8	873.6	871.5	867.2	862.8	856.4	847.7
27.5°	832.7	830.5	830.5	830.5	828.3	826.2	824.0	824.0	819.7	811.1	802.5
30°	789.5	789.5	789.5	785.2	780.9	778.7	778.7	774.4	767.9	763.6	757.2
32.5°	737.7	737.7	739.9	737.7	737.7	737.7	733.4	729.1	720.5	714.0	703.2
35°	662.2	666.6	668.7	673.0	677.3	681.7	683.8	683.8	675.2	664.4	651.5
37.5°	588.9	591.1	593.2	601.8	606.2	610.5	612.6	621.3	627.7	616.9	604.0
40°	515.6	517.7	524.2	526.3	537.1	539.3	545.8	554.4	563.0	565.2	558.7
42.5°	448.7	450.8	455.2	459.5	470.3	476.7	478.9	485.4	496.1	504.8	502.6
45°	392.6	392.6	394.8	401.2	407.7	412.0	418.5	427.1	435.7	440.1	440.1
47.5°	338.7	338.7	340.8	347.3	355.9	355.9	360.2	368.9	379.7	379.7	379.7
50°	295.5	297.7	297.7	302.0	306.3	308.5	312.8	321.4	325.7	325.7	323.6
52.5°	258.9	258.9	261.0	263.2	265.3	269.6	269.6	274.0	278.3	278.3	274.0
55°	226.5	226.5	226.5	228.7	230.8	233.0	235.1	237.3	235.1	233.0	230.8
57.5°	198.5	198.5	198.5	198.5	200.6	202.8	202.8	202.8	200.6	198.5	192.0
60°	174.7	174.7	174.7	174.7	174.7	174.7	174.7	172.6	168.3	166.1	161.8
62.5°	151.0	151.0	151.0	151.0	151.0	151.0	148.8	146.7	144.5	138.1	133.7
65°	129.4	131.6	131.6	129.4	129.4	127.3	127.3	123.0	120.8	116.5	112.2
67.5°	112.2	112.2	112.2	112.2	110.0	107.9	107.9	103.5	101.4	97.1	90.6
70°	94.9	94.9	92.8	92.8	92.8	90.6	88.4	86.3	82.0	77.7	73.3
72.5°	77.7	77.7	77.7	77.7	73.3	73.3	71.2	69.0	64.7	62.6	58.2
75°	62.6	62.6	62.6	60.4	60.4	58.2	56.1	53.9	51.8	47.5	45.3
77.5°	49.6	49.6	49.6	47.5	45.3	45.3	43.1	41.0	38.8	36.7	32.4
80°	36.7	36.7	34.5	34.5	32.4	32.4	32.4	30.2	28.0	25.9	23.7
82.5°	23.7	23.7	23.7	23.7	21.6	21.6	19.4	19.4	17.3	15.1	15.1
85°	12.9	12.9	12.9	12.9	10.8	10.8	10.8	10.8	8.6	8.6	6.5
87.5°	2.2	2.2	2.2	2.2	2.2	2.2	4.3	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°	1044.0	1044.0	1044.0	1044.0	1044.0	1044.0	1044.0	1044.0	1044.0	1044.0	1044.0
2.5°	1048.4	1048.4	1046.2	1046.2	1046.2	1044.0	1044.0	1041.9	1041.9	1039.7	1039.7
5°	1048.4	1046.2	1044.0	1041.9	1039.7	1039.7	1037.6	1033.3	1031.1	1031.1	1026.8
7.5°	1039.7	1037.6	1033.3	1031.1	1028.9	1026.8	1022.5	1020.3	1016.0	1011.7	1009.5
10°	1026.8	1022.5	1016.0	1011.7	1011.7	1007.4	1003.1	998.7	992.3	990.1	983.6
12.5°	1005.2	998.7	994.4	990.1	985.8	983.6	977.2	972.9	964.2	959.9	953.4
15°	981.5	975.0	968.5	959.9	957.8	953.4	947.0	938.3	934.0	925.4	918.9
17.5°	953.4	942.7	936.2	927.6	923.2	918.9	908.1	901.7	895.2	884.4	877.9
20°	916.8	908.1	899.5	888.7	884.4	877.9	869.3	858.5	849.9	841.3	832.7
22.5°	877.9	869.3	858.5	847.7	841.3	834.8	824.0	813.2	802.5	791.7	785.2
25°	834.8	824.0	813.2	802.5	793.8	789.5	776.6	765.8	752.8	742.1	733.4
27.5°	791.7	780.9	767.9	752.8	744.2	739.9	727.0	711.9	698.9	690.3	679.5
30°	744.2	731.3	716.2	703.2	694.6	688.1	677.3	662.2	651.5	640.7	625.6
32.5°	692.4	679.5	668.7	651.5	645.0	638.5	623.4	608.3	593.2	582.4	573.8
35°	640.7	632.0	619.1	601.8	591.1	582.4	563.0	550.1	537.1	526.3	517.7
37.5°	593.2	580.3	558.7	539.3	530.7	524.2	502.6	489.7	474.6	468.1	455.2
40°	541.4	522.0	502.6	483.2	474.6	465.9	450.8	431.4	420.6	409.9	401.2
42.5°	489.7	463.8	444.4	427.1	416.3	407.7	390.4	375.3	362.4	355.9	347.3
45°	431.4	412.0	390.4	371.0	364.6	353.8	338.7	325.7	314.9	306.3	299.8
47.5°	371.0	360.2	338.7	321.4	312.8	304.2	291.2	278.3	267.5	258.9	254.5
50°	317.1	308.5	293.4	274.0	267.5	258.9	245.9	237.3	226.5	217.9	213.6
52.5°	267.5	258.9	248.1	233.0	224.3	220.0	207.1	198.5	192.0	185.5	179.0
55°	224.3	215.7	207.1	194.1	187.7	181.2	172.6	163.9	157.5	153.2	148.8
57.5°	187.7	179.0	170.4	161.8	155.3	151.0	142.4	138.1	131.6	125.1	123.0
60°	155.3	148.8	142.4	133.7	129.4	123.0	116.5	110.0	105.7	101.4	97.1
62.5°	129.4	123.0	116.5	107.9	105.7	101.4	94.9	88.4	84.1	82.0	77.7
65°	105.7	99.2	94.9	88.4	84.1	82.0	75.5	71.2	66.9	62.6	58.2
67.5°	86.3	82.0	77.7	71.2	66.9	64.7	58.2	53.9	51.8	47.5	45.3
70°	69.0	64.7	60.4	56.1	51.8	49.6	45.3	41.0	38.8	34.5	32.4
72.5°	53.9	49.6	47.5	41.0	38.8	36.7	32.4	30.2	28.0	25.9	23.7
75°	41.0	38.8	34.5	30.2	28.0	28.0	23.7	21.6	19.4	17.3	15.1
77.5°	30.2	28.0	23.7	21.6	19.4	19.4	17.3	15.1	12.9	10.8	10.8
80°	21.6	17.3	15.1	12.9	12.9	10.8	10.8	8.6	6.5	6.5	4.3
82.5°	12.9	10.8	8.6	8.6	6.5	6.5	6.5	4.3	4.3	2.2	2.2
85°	6.5	4.3	4.3	4.3	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°	1044.0	1044.0	1044.0	1044.0	1044.0	1044.0	1044.0	1044.0	1044.0	1044.0	1044.0
2.5°	1037.6	1035.4	1035.4	1035.4	1033.3	1033.3	1031.1	1031.1	1028.9	1028.9	1028.9
5°	1024.6	1022.5	1020.3	1018.2	1018.2	1016.0	1013.8	1013.8	1011.7	1009.5	1007.4
7.5°	1005.2	1003.1	1000.9	996.6	994.4	992.3	990.1	985.8	983.6	981.5	981.5
10°	979.3	975.0	970.7	968.5	968.5	962.1	959.9	957.8	953.4	951.3	947.0
12.5°	947.0	942.7	938.3	934.0	931.9	927.6	925.4	921.1	916.8	912.5	908.1
15°	912.5	906.0	899.5	897.4	893.0	890.9	884.4	877.9	875.8	871.5	869.3
17.5°	869.3	860.7	858.5	854.2	849.9	845.6	841.3	834.8	828.3	826.2	819.7
20°	824.0	817.6	808.9	806.8	802.5	798.1	791.7	785.2	780.9	776.6	772.3
22.5°	774.4	770.1	759.3	757.2	752.8	746.4	739.9	733.4	731.3	724.8	720.5
25°	724.8	714.0	707.5	703.2	701.1	694.6	690.3	683.8	679.5	673.0	668.7
27.5°	668.7	662.2	655.8	649.3	647.1	642.8	636.4	629.9	625.6	619.1	614.8
30°	619.1	610.5	601.8	597.5	595.4	586.7	582.4	578.1	569.5	565.2	563.0
32.5°	563.0	554.4	547.9	547.9	541.4	537.1	528.5	524.2	522.0	513.4	509.1
35°	506.9	500.5	496.1	494.0	491.8	483.2	478.9	474.6	468.1	465.9	459.5
37.5°	450.8	442.2	437.9	435.7	433.6	431.4	429.3	422.8	418.5	414.2	409.9
40°	392.6	388.3	384.0	384.0	381.8	379.7	375.3	373.2	371.0	366.7	362.4
42.5°	343.0	336.5	334.4	332.2	332.2	327.9	327.9	325.7	323.6	319.3	314.9
45°	293.4	289.1	286.9	282.6	282.6	280.4	280.4	280.4	276.1	274.0	271.8
47.5°	250.2	245.9	243.8	241.6	239.4	237.3	237.3	237.3	233.0	233.0	228.7
50°	209.2	204.9	204.9	204.9	202.8	200.6	198.5	194.1	194.1	192.0	189.8
52.5°	176.9	172.6	170.4	168.3	168.3	166.1	163.9	161.8	157.5	155.3	153.2
55°	144.5	142.4	138.1	138.1	135.9	133.7	131.6	129.4	127.3	120.8	118.6
57.5°	118.6	114.3	112.2	110.0	110.0	107.9	103.5	101.4	97.1	92.8	88.4
60°	94.9	90.6	88.4	86.3	86.3	82.0	79.8	75.5	71.2	66.9	62.6
62.5°	73.3	71.2	66.9	64.7	64.7	62.6	58.2	53.9	49.6	45.3	38.8
65°	56.1	53.9	49.6	49.6	47.5	43.1	38.8	34.5	30.2	25.9	21.6
67.5°	41.0	38.8	36.7	34.5	32.4	28.0	23.7	19.4	15.1	10.8	6.5
70°	30.2	28.0	23.7	23.7	21.6	17.3	12.9	8.6	6.5	4.3	4.3
72.5°	19.4	17.3	15.1	12.9	10.8	8.6	4.3	2.2	2.2	2.2	2.2
75°	12.9	10.8	8.6	6.5	6.5	2.2	2.2	2.2	2.2	2.2	2.2
77.5°	8.6	6.5	4.3	2.2	2.2	0.0	2.2	2.2	0.0	2.2	2.2
80°	4.3	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	2.2	2.2	2.2	2.2	0.0	2.2	0.0	2.2	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: P238350

CATALOG NUMBER: PRS620D010-S6M12-61SWWH-4000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1044.0	1044.0	1044.0	1044.0	1044.0	1044.0	1044.0	1044.0
2.5°	1026.8	1026.8	1026.8	1026.8	1026.8	1026.8	1026.8	1024.6
5°	1005.2	1005.2	1005.2	1005.2	1003.1	1003.1	1003.1	1003.1
7.5°	979.3	977.2	975.0	975.0	975.0	972.9	972.9	975.0
10°	944.8	944.8	942.7	942.7	940.5	940.5	940.5	938.3
12.5°	906.0	903.8	903.8	899.5	901.7	899.5	897.4	899.5
15°	862.8	860.7	858.5	858.5	858.5	856.4	856.4	858.5
17.5°	817.6	813.2	811.1	813.2	808.9	808.9	808.9	806.8
20°	767.9	763.6	761.5	761.5	759.3	757.2	757.2	757.2
22.5°	716.2	714.0	709.7	709.7	707.5	707.5	705.4	705.4
25°	666.6	660.1	660.1	657.9	653.6	655.8	651.5	651.5
27.5°	610.5	608.3	608.3	606.2	601.8	599.7	597.5	599.7
30°	558.7	554.4	552.2	550.1	550.1	550.1	547.9	545.8
32.5°	506.9	502.6	498.3	498.3	498.3	494.0	494.0	494.0
35°	455.2	453.0	448.7	446.5	446.5	444.4	442.2	440.1
37.5°	405.5	401.2	399.1	394.8	394.8	390.4	388.3	390.4
40°	355.9	351.6	349.5	349.5	345.1	340.8	340.8	340.8
42.5°	310.6	304.2	304.2	299.8	295.5	293.4	289.1	291.2
45°	267.5	261.0	258.9	258.9	250.2	248.1	245.9	245.9
47.5°	224.3	222.2	217.9	213.6	207.1	200.6	198.5	198.5
50°	185.5	179.0	176.9	174.7	166.1	161.8	157.5	157.5
52.5°	148.8	142.4	138.1	135.9	129.4	123.0	120.8	118.6
55°	114.3	107.9	105.7	103.5	94.9	90.6	86.3	84.1
57.5°	84.1	79.8	75.5	71.2	64.7	60.4	56.1	53.9
60°	58.2	51.8	49.6	47.5	41.0	36.7	32.4	32.4
62.5°	36.7	30.2	28.0	25.9	21.6	17.3	17.3	17.3
65°	15.1	10.8	10.8	10.8	8.6	8.6	8.6	8.6
67.5°	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
70°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
72.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
75°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
77.5°	2.2	2.2	2.2	2.2	0.0	0.0	2.2	2.2
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)