

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: P238371

Luminaire Tested: **PRS630D010-S6M24-61SWWMB-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P238371
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-3000K
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 / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1680.8 lumens
Efficiency: N/A
Efficacy: 65.9 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

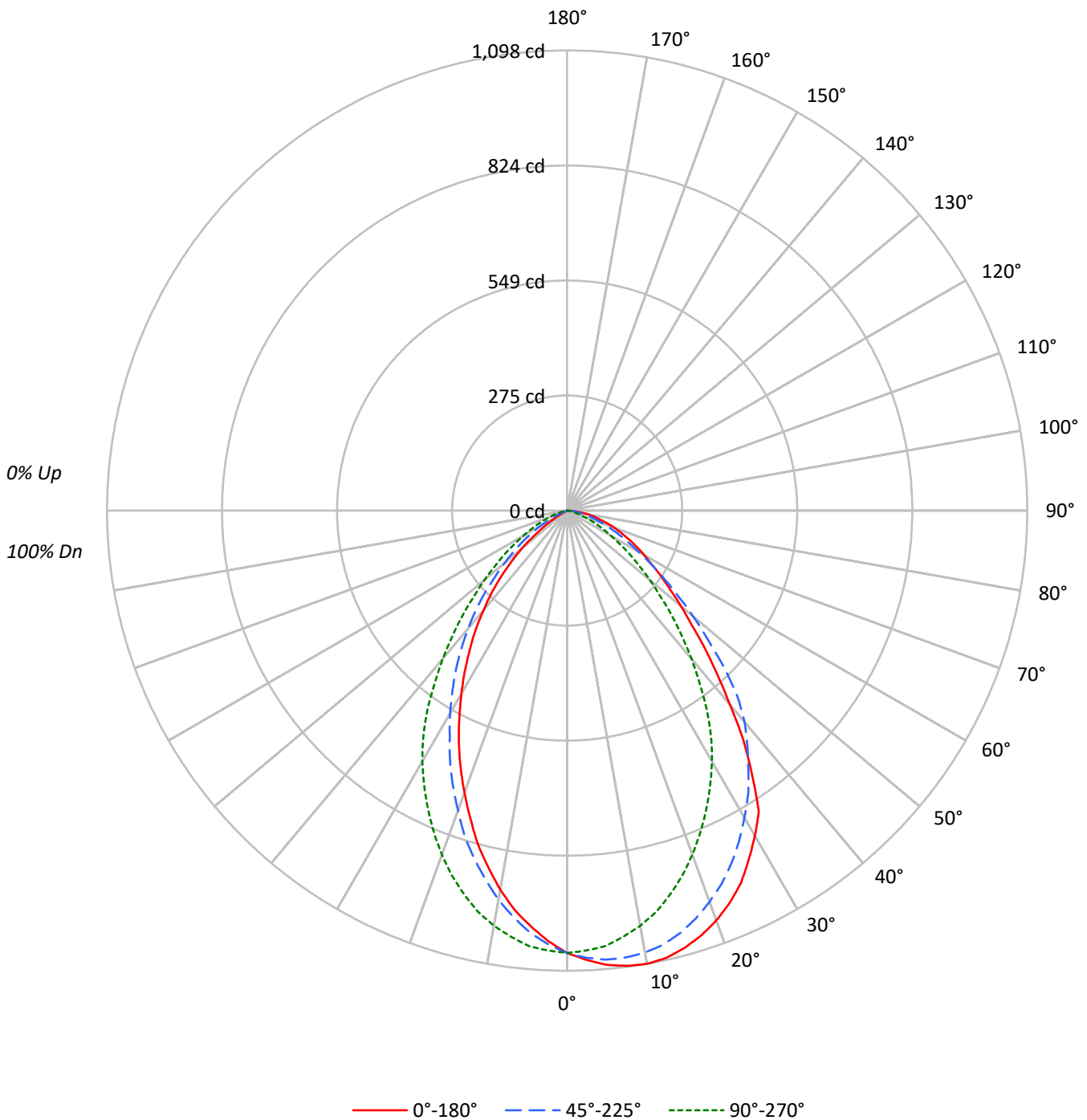
Input Watts (W): 25.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	45454	45454	45454
5°	47028	45087	43039
10°	48009	43973	40152
15°	48167	42274	36712
20°	47684	40023	32820
25°	46595	37345	29046
30°	44546	34369	25062
35°	40404	30564	21251
40°	33948	25950	17396
45°	28265	21427	13524
50°	23739	17221	9532
55°	20605	13677	5059
60°	18264	10531	1292
65°	16525	7885	0
70°	15081	5338	0
75°	13292	3327	0
80°	11753	1860	0
85°	8645	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.4	5.9
10°-20°	266.6	15.9
20°-30°	363.4	21.6
30°-40°	370.9	22.1
40°-50°	286.7	17.1
50°-60°	173.2	10.3
60°-70°	83.0	4.9
70°-80°	32.1	1.9
80°-90°	6.4	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°	728.4	43.3
0°-40°	1099.3	65.4
0°-60°	1559.2	92.8
0°-90°	1680.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1680.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1056	1056	1056	1056	1056	
5°	1088	1076	1043	1011	996	104
15°	1081	1043	948	858	824	304
25°	981	928	786	661	611	449
35°	769	754	582	462	404	477
45°	464	529	352	277	222	360
55°	274	282	182	130	67	247
65°	162	137	77	30	0	162
75°	80	57	20	0	0	87
85°	18	10	0	0	0	21
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°	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7
2.5°	1073.1	1073.1	1073.1	1073.1	1073.1	1073.1	1073.1	1070.6	1070.6	1068.2	1068.2
5°	1088.1	1088.1	1088.1	1085.6	1085.6	1083.1	1083.1	1080.6	1080.6	1075.6	1075.6
7.5°	1095.6	1095.6	1095.6	1093.1	1093.1	1090.6	1090.6	1088.1	1083.1	1080.6	1075.6
10°	1098.1	1098.1	1095.6	1095.6	1090.6	1090.6	1090.6	1085.6	1080.6	1075.6	1070.6
12.5°	1093.1	1090.6	1090.6	1088.1	1085.6	1083.1	1080.6	1078.1	1073.1	1065.7	1060.7
15°	1080.6	1080.6	1080.6	1078.1	1073.1	1070.6	1070.6	1065.7	1058.2	1050.7	1043.2
17.5°	1063.2	1063.2	1063.2	1060.7	1055.7	1053.2	1050.7	1045.7	1038.2	1030.7	1020.7
20°	1040.7	1040.7	1038.2	1035.7	1030.7	1030.7	1028.2	1020.7	1013.2	1003.3	993.3
22.5°	1013.2	1013.2	1010.8	1008.3	1003.3	1000.8	998.3	990.8	983.3	973.3	963.3
25°	980.8	978.3	975.8	973.3	970.8	965.8	963.3	958.3	950.9	938.4	928.4
27.5°	938.4	938.4	935.9	933.4	930.9	928.4	925.9	918.4	910.9	898.4	888.5
30°	896.0	896.0	893.5	891.0	888.5	886.0	881.0	873.5	868.5	858.5	846.0
32.5°	851.0	848.5	848.5	848.5	843.5	843.5	838.6	831.1	821.1	813.6	803.6
35°	768.7	771.2	773.7	781.1	783.6	788.6	788.6	786.1	776.2	766.2	753.7
37.5°	691.3	686.3	693.8	698.8	708.8	713.8	716.3	726.2	731.2	718.8	706.3
40°	604.0	608.9	613.9	621.4	631.4	633.9	641.4	648.9	661.4	666.3	658.9
42.5°	529.1	529.1	536.6	544.1	551.5	559.0	566.5	576.5	591.5	599.0	601.5
45°	464.2	461.7	464.2	474.2	484.2	489.2	494.1	506.6	521.6	531.6	529.1
47.5°	401.8	404.3	409.3	414.3	419.3	424.3	429.3	444.2	454.2	456.7	454.2
50°	354.4	351.9	356.9	359.4	366.9	369.4	374.4	381.8	389.3	391.8	391.8
52.5°	309.5	312.0	312.0	314.5	319.4	321.9	324.4	331.9	331.9	334.4	331.9
55°	274.5	272.0	274.5	277.0	279.5	282.0	284.5	284.5	284.5	284.5	282.0
57.5°	239.6	239.6	242.1	242.1	244.6	247.1	247.1	244.6	244.6	239.6	237.1
60°	212.1	212.1	212.1	212.1	214.6	214.6	214.6	209.6	204.6	204.6	197.2
62.5°	187.2	184.7	187.2	187.2	187.2	184.7	182.2	177.2	174.7	169.7	164.7
65°	162.2	162.2	162.2	162.2	159.7	159.7	157.2	152.2	147.2	144.7	137.3
67.5°	139.8	139.8	139.8	139.8	137.3	134.8	132.3	127.3	122.3	119.8	112.3
70°	119.8	117.3	117.3	117.3	114.8	112.3	109.8	107.3	102.3	97.3	92.3
72.5°	99.8	99.8	97.3	97.3	94.8	92.3	89.8	87.3	82.4	77.4	72.4
75°	79.9	79.9	79.9	77.4	74.9	74.9	72.4	67.4	64.9	59.9	57.4
77.5°	64.9	62.4	62.4	59.9	57.4	57.4	54.9	52.4	49.9	47.4	42.4
80°	47.4	47.4	47.4	44.9	42.4	42.4	39.9	37.4	34.9	32.4	29.9
82.5°	32.4	32.4	32.4	29.9	29.9	27.5	27.5	25.0	25.0	22.5	20.0
85°	17.5	17.5	17.5	17.5	17.5	15.0	15.0	15.0	12.5	12.5	10.0
87.5°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	2.5	2.5
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°	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7
2.5°	1065.7	1065.7	1063.2	1060.7	1060.7	1058.2	1055.7	1055.7	1053.2	1050.7	1048.2
5°	1070.6	1068.2	1063.2	1060.7	1058.2	1058.2	1053.2	1048.2	1045.7	1043.2	1038.2
7.5°	1070.6	1065.7	1060.7	1055.7	1053.2	1050.7	1043.2	1038.2	1033.2	1025.7	1020.7
10°	1065.7	1058.2	1050.7	1043.2	1040.7	1035.7	1028.2	1023.2	1013.2	1005.8	998.3
12.5°	1053.2	1045.7	1035.7	1025.7	1020.7	1015.7	1005.8	998.3	988.3	980.8	970.8
15°	1035.7	1025.7	1015.7	1005.8	998.3	995.8	983.3	970.8	960.8	948.4	935.9
17.5°	1010.8	1000.8	988.3	978.3	970.8	965.8	950.9	938.4	925.9	913.4	900.9
20°	983.3	970.8	958.3	943.4	938.4	930.9	915.9	900.9	886.0	873.5	858.5
22.5°	950.9	938.4	923.4	910.9	900.9	893.5	878.5	861.0	846.0	831.1	816.1
25°	913.4	900.9	886.0	871.0	861.0	853.5	836.1	818.6	803.6	786.1	771.2
27.5°	876.0	861.0	846.0	826.1	818.6	808.6	791.1	773.7	756.2	738.7	721.3
30°	833.6	816.1	801.1	781.1	773.7	763.7	743.7	726.2	708.8	691.3	671.3
32.5°	788.6	771.2	753.7	736.2	726.2	716.3	698.8	678.8	656.4	638.9	623.9
35°	738.7	723.7	706.3	686.3	673.8	663.9	638.9	618.9	596.5	581.5	564.0
37.5°	693.8	673.8	651.4	626.4	613.9	601.5	576.5	556.5	539.1	519.1	504.1
40°	638.9	616.4	591.5	561.5	554.0	541.6	519.1	496.6	479.2	461.7	446.7
42.5°	579.0	554.0	531.6	506.6	494.1	481.7	459.2	436.7	419.3	404.3	389.3
45°	519.1	496.6	471.7	446.7	434.2	424.3	401.8	381.8	366.9	351.9	339.4
47.5°	451.7	436.7	414.3	391.8	376.8	366.9	349.4	331.9	314.5	299.5	292.0
50°	386.8	376.8	359.4	336.9	326.9	317.0	297.0	282.0	269.5	257.1	247.1
52.5°	326.9	319.4	307.0	287.0	279.5	267.0	252.1	239.6	227.1	217.1	209.6
55°	277.0	267.0	257.1	244.6	234.6	229.6	212.1	202.2	192.2	182.2	174.7
57.5°	229.6	224.6	214.6	204.6	197.2	189.7	177.2	167.2	159.7	149.7	144.7
60°	194.7	184.7	177.2	167.2	162.2	157.2	147.2	137.3	129.8	122.3	117.3
62.5°	159.7	152.2	144.7	134.8	132.3	127.3	119.8	109.8	104.8	97.3	92.3
65°	132.3	124.8	119.8	109.8	107.3	102.3	94.8	87.3	82.4	77.4	72.4
67.5°	107.3	102.3	94.8	87.3	84.9	79.9	72.4	67.4	62.4	57.4	54.9
70°	87.3	82.4	74.9	67.4	64.9	62.4	54.9	52.4	47.4	42.4	39.9
72.5°	69.9	64.9	57.4	52.4	49.9	47.4	42.4	37.4	34.9	29.9	27.5
75°	52.4	47.4	42.4	37.4	34.9	34.9	29.9	27.5	25.0	20.0	17.5
77.5°	39.9	34.9	29.9	27.5	25.0	22.5	20.0	17.5	15.0	12.5	10.0
80°	27.5	25.0	20.0	17.5	17.5	15.0	12.5	12.5	10.0	7.5	5.0
82.5°	17.5	15.0	12.5	10.0	10.0	10.0	7.5	5.0	5.0	5.0	2.5
85°	7.5	7.5	5.0	5.0	5.0	5.0	2.5	2.5	2.5	0.0	0.0
87.5°	2.5	2.5	0.0	2.5	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°	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7
2.5°	1048.2	1045.7	1043.2	1043.2	1040.7	1040.7	1038.2	1038.2	1035.7	1035.7	1033.2
5°	1033.2	1030.7	1025.7	1025.7	1023.2	1020.7	1015.7	1013.2	1010.8	1008.3	1005.8
7.5°	1015.7	1008.3	1003.3	1000.8	998.3	993.3	988.3	983.3	978.3	975.8	970.8
10°	988.3	980.8	975.8	973.3	968.3	960.8	955.8	948.4	943.4	938.4	933.4
12.5°	960.8	950.9	940.9	938.4	933.4	923.4	918.4	908.4	900.9	896.0	891.0
15°	925.9	915.9	903.4	898.4	896.0	883.5	876.0	868.5	858.5	851.0	846.0
17.5°	886.0	876.0	863.5	856.0	851.0	841.0	828.6	821.1	813.6	801.1	796.1
20°	846.0	831.1	818.6	813.6	806.1	793.6	783.6	773.7	761.2	753.7	743.7
22.5°	798.6	786.1	771.2	763.7	758.7	743.7	733.7	721.3	711.3	703.8	691.3
25°	756.2	738.7	723.7	716.3	708.8	696.3	681.3	671.3	661.4	651.4	641.4
27.5°	706.3	688.8	673.8	668.8	661.4	643.9	633.9	618.9	606.5	599.0	589.0
30°	656.4	638.9	623.9	616.4	608.9	594.0	581.5	569.0	559.0	549.1	539.1
32.5°	606.5	591.5	576.5	569.0	561.5	546.6	534.1	519.1	509.1	496.6	486.7
35°	549.1	534.1	521.6	514.1	509.1	496.6	484.2	471.7	461.7	449.2	439.2
37.5°	489.2	474.2	466.7	459.2	454.2	444.2	434.2	424.3	414.3	404.3	391.8
40°	431.8	424.3	409.3	406.8	401.8	391.8	384.3	374.4	366.9	356.9	346.9
42.5°	379.3	366.9	356.9	354.4	349.4	341.9	334.4	326.9	321.9	312.0	304.5
45°	329.4	319.4	309.5	304.5	302.0	294.5	287.0	282.0	277.0	269.5	262.0
47.5°	282.0	272.0	264.5	262.0	257.1	252.1	244.6	239.6	232.1	227.1	219.6
50°	239.6	232.1	224.6	222.1	217.1	214.6	207.1	202.2	194.7	187.2	182.2
52.5°	202.2	194.7	189.7	187.2	184.7	177.2	172.2	167.2	159.7	154.7	147.2
55°	167.2	162.2	157.2	154.7	152.2	147.2	142.3	134.8	129.8	122.3	114.8
57.5°	137.3	132.3	127.3	124.8	122.3	117.3	112.3	107.3	99.8	92.3	84.9
60°	109.8	107.3	102.3	99.8	97.3	92.3	87.3	79.9	74.9	64.9	59.9
62.5°	87.3	84.9	79.9	77.4	74.9	67.4	62.4	57.4	49.9	42.4	34.9
65°	67.4	62.4	57.4	57.4	54.9	49.9	42.4	34.9	29.9	22.5	15.0
67.5°	49.9	44.9	39.9	39.9	37.4	32.4	25.0	20.0	12.5	7.5	0.0
70°	34.9	32.4	27.5	25.0	22.5	17.5	12.5	7.5	2.5	0.0	0.0
72.5°	25.0	20.0	17.5	15.0	12.5	7.5	2.5	0.0	0.0	0.0	0.0
75°	15.0	12.5	7.5	7.5	5.0	2.5	0.0	0.0	0.0	0.0	0.0
77.5°	7.5	7.5	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	5.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	2.5	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: P238371

CATALOG NUMBER: PRS630D010-S6M24-61SWWMB-3000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7
2.5°	1033.2	1030.7	1030.7	1030.7	1030.7	1030.7	1028.2	1028.2
5°	1003.3	1000.8	1000.8	998.3	998.3	998.3	995.8	995.8
7.5°	968.3	965.8	963.3	963.3	960.8	960.8	958.3	960.8
10°	928.4	923.4	923.4	923.4	920.9	918.4	918.4	918.4
12.5°	886.0	881.0	878.5	876.0	873.5	873.5	871.0	871.0
15°	838.6	833.6	831.1	828.6	826.1	823.6	821.1	823.6
17.5°	788.6	783.6	781.1	778.7	773.7	773.7	771.2	768.7
20°	736.2	731.2	728.7	726.2	723.7	721.3	718.8	716.3
22.5°	683.8	681.3	673.8	673.8	668.8	666.3	663.9	663.9
25°	631.4	626.4	623.9	618.9	613.9	611.4	611.4	611.4
27.5°	579.0	574.0	569.0	566.5	564.0	561.5	556.5	556.5
30°	529.1	521.6	516.6	516.6	511.6	506.6	506.6	504.1
32.5°	479.2	471.7	466.7	464.2	461.7	456.7	454.2	454.2
35°	429.3	421.8	419.3	414.3	409.3	409.3	401.8	404.3
37.5°	384.3	374.4	371.9	369.4	361.9	359.4	356.9	359.4
40°	336.9	329.4	324.4	321.9	317.0	312.0	309.5	309.5
42.5°	292.0	287.0	282.0	279.5	272.0	267.0	264.5	267.0
45°	252.1	244.6	242.1	237.1	229.6	224.6	222.1	222.1
47.5°	212.1	207.1	199.7	197.2	189.7	184.7	179.7	179.7
50°	174.7	167.2	162.2	157.2	152.2	144.7	139.8	142.3
52.5°	139.8	129.8	127.3	122.3	114.8	107.3	102.3	102.3
55°	107.3	99.8	94.8	92.3	82.4	74.9	69.9	67.4
57.5°	77.4	69.9	67.4	62.4	54.9	47.4	39.9	39.9
60°	52.4	44.9	39.9	37.4	29.9	25.0	17.5	15.0
62.5°	27.5	22.5	17.5	15.0	10.0	5.0	5.0	2.5
65°	7.5	2.5	2.5	2.5	2.5	2.5	2.5	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)