

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: P238366

Luminaire Tested: **PRS630D010-S6M24-61SWWMW-4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P238366
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: PRS630D010-S6M24-61SWWMW-4000K
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 / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1942.6 lumens
Efficiency: N/A
Efficacy: 76.2 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

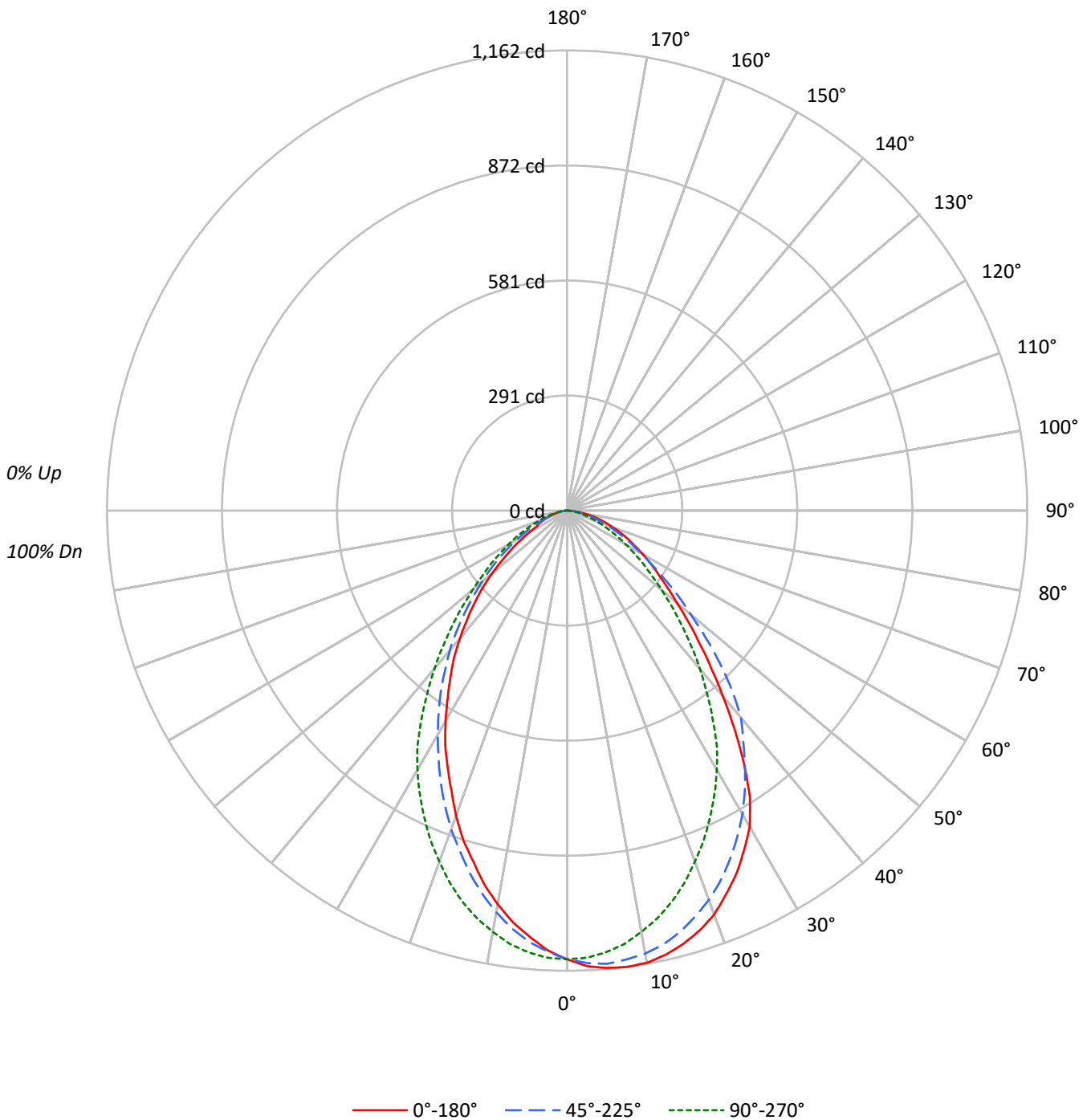
Input Watts (W): 25.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	48778	48778	48778
5°	50105	48398	46686
10°	50684	47226	44118
15°	50498	45569	40870
20°	49736	43216	37544
25°	48062	40556	33920
30°	45848	37596	30521
35°	40856	33650	27006
40°	34358	29322	23696
45°	28716	24867	20215
50°	24181	20825	16592
55°	21161	17603	13054
60°	19056	14751	9533
65°	17177	12083	8048
70°	15257	9945	6962
75°	14024	7885	6138
80°	11753	5876	5232
85°	9090	3903	3903



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.7	5.4
10°-20°	287.7	14.8
20°-30°	395.2	20.3
30°-40°	409.5	21.1
40°-50°	330.4	17.0
50°-60°	219.4	11.3
60°-70°	123.9	6.4
70°-80°	56.9	2.9
80°-90°	13.8	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°	788.6	40.6
0°-40°	1198.2	61.7
0°-60°	1747.9	90.0
0°-90°	1942.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1942.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1133	1133	1133	1133	1133	
5°	1159	1149	1120	1093	1080	111
15°	1133	1101	1022	948	917	319
25°	1012	972	854	756	714	464
35°	777	782	640	556	514	482
45°	472	545	408	366	332	367
55°	282	298	234	211	174	255
65°	169	156	119	95	79	167
75°	84	68	47	34	37	89
85°	18	13	8	10	8	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°	1132.9	1132.9	1132.9	1132.9	1132.9	1132.9	1132.9	1132.9	1132.9	1132.9	1132.9
2.5°	1151.4	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8	1148.8	1146.1	1146.1	1143.5
5°	1159.3	1159.3	1159.3	1159.3	1156.7	1156.7	1156.7	1154.0	1151.4	1148.8	1148.8
7.5°	1161.9	1161.9	1161.9	1159.3	1159.3	1159.3	1156.7	1154.0	1151.4	1148.8	1143.5
10°	1159.3	1159.3	1156.7	1156.7	1154.0	1151.4	1151.4	1148.8	1146.1	1140.8	1135.6
12.5°	1148.8	1148.8	1148.8	1146.1	1143.5	1143.5	1140.8	1135.6	1132.9	1127.7	1122.4
15°	1132.9	1132.9	1132.9	1130.3	1127.7	1125.0	1125.0	1119.8	1114.5	1109.2	1101.3
17.5°	1111.9	1111.9	1111.9	1109.2	1104.0	1104.0	1101.3	1096.1	1090.8	1085.5	1075.0
20°	1085.5	1082.9	1082.9	1080.2	1075.0	1075.0	1072.3	1067.1	1061.8	1053.9	1046.0
22.5°	1048.6	1051.3	1048.6	1046.0	1043.4	1040.7	1038.1	1032.8	1027.6	1019.6	1011.7
25°	1011.7	1009.1	1009.1	1009.1	1006.5	1001.2	998.6	995.9	988.0	980.1	972.2
27.5°	967.0	961.7	961.7	964.3	961.7	959.1	956.4	951.1	945.9	938.0	930.1
30°	922.2	919.5	919.5	916.9	911.6	909.0	909.0	903.7	901.1	893.2	885.3
32.5°	858.9	861.6	864.2	866.8	864.2	864.2	864.2	856.3	848.4	843.1	835.2
35°	777.3	779.9	785.2	790.4	801.0	803.6	806.2	808.9	801.0	793.1	782.5
37.5°	692.9	698.2	700.8	708.7	716.7	724.6	727.2	737.7	745.6	743.0	729.8
40°	611.3	613.9	621.8	624.4	637.6	645.5	650.8	661.3	677.1	682.4	682.4
42.5°	537.5	540.1	542.8	550.7	561.2	571.7	574.4	584.9	603.4	611.3	616.5
45°	471.6	474.3	479.5	482.2	492.7	498.0	503.2	519.0	529.6	542.8	545.4
47.5°	413.7	413.7	416.3	424.2	432.1	437.4	440.0	453.2	463.7	471.6	474.3
50°	361.0	363.6	366.2	368.9	374.1	379.4	384.7	395.2	403.1	408.4	405.8
52.5°	318.8	321.4	321.4	324.1	329.3	334.6	337.2	342.5	347.8	350.4	353.1
55°	281.9	281.9	284.6	287.2	289.8	292.5	292.5	297.7	297.7	300.4	297.7
57.5°	250.3	250.3	250.3	252.9	252.9	255.6	255.6	255.6	255.6	255.6	252.9
60°	221.3	218.7	221.3	221.3	224.0	224.0	224.0	221.3	218.7	218.7	216.0
62.5°	192.3	192.3	192.3	195.0	195.0	192.3	192.3	192.3	187.1	187.1	184.4
65°	168.6	166.0	168.6	168.6	168.6	166.0	166.0	163.4	160.7	158.1	155.5
67.5°	144.9	144.9	144.9	144.9	142.3	142.3	142.3	137.0	134.4	131.7	129.1
70°	121.2	123.8	121.2	121.2	121.2	118.6	118.6	115.9	113.3	110.7	108.0
72.5°	102.8	102.8	102.8	100.1	100.1	97.5	97.5	94.9	92.2	89.6	86.9
75°	84.3	84.3	84.3	81.7	79.0	79.0	79.0	76.4	73.8	71.1	68.5
77.5°	65.9	65.9	63.2	63.2	60.6	60.6	60.6	58.0	55.3	52.7	52.7
80°	47.4	47.4	47.4	47.4	44.8	44.8	44.8	42.2	39.5	39.5	36.9
82.5°	31.6	34.3	31.6	31.6	29.0	29.0	29.0	29.0	26.3	26.3	26.3
85°	18.4	18.4	18.4	18.4	15.8	18.4	15.8	15.8	15.8	15.8	13.2
87.5°	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
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°	1132.9	1132.9	1132.9	1132.9	1132.9	1132.9	1132.9	1132.9	1132.9	1132.9	1132.9
2.5°	1143.5	1140.8	1140.8	1138.2	1138.2	1135.6	1135.6	1132.9	1132.9	1130.3	1127.7
5°	1143.5	1140.8	1138.2	1138.2	1135.6	1132.9	1130.3	1127.7	1122.4	1119.8	1117.1
7.5°	1140.8	1138.2	1132.9	1127.7	1125.0	1122.4	1119.8	1114.5	1109.2	1104.0	1098.7
10°	1132.9	1127.7	1119.8	1114.5	1111.9	1106.6	1101.3	1096.1	1088.2	1080.2	1075.0
12.5°	1117.1	1109.2	1101.3	1093.4	1090.8	1085.5	1077.6	1069.7	1061.8	1053.9	1046.0
15°	1093.4	1085.5	1077.6	1069.7	1064.4	1061.8	1051.3	1040.7	1032.8	1022.3	1011.7
17.5°	1067.1	1059.2	1048.6	1038.1	1032.8	1027.6	1019.6	1006.5	998.6	985.4	977.5
20°	1038.1	1027.6	1014.4	1003.8	998.6	993.3	980.1	969.6	956.4	943.2	935.3
22.5°	1001.2	988.0	977.5	967.0	959.1	953.8	940.6	927.4	914.3	901.1	887.9
25°	959.1	948.5	935.3	924.8	916.9	909.0	895.8	882.6	866.8	853.7	840.5
27.5°	919.5	906.4	893.2	877.4	872.1	861.6	848.4	835.2	819.4	806.2	790.4
30°	872.1	858.9	843.1	829.9	824.7	816.8	801.0	785.2	772.0	756.2	743.0
32.5°	824.7	811.5	798.3	782.5	774.6	764.1	748.3	732.5	716.7	703.5	687.7
35°	774.6	761.4	745.6	729.8	719.3	708.7	690.3	671.9	656.1	640.2	632.3
37.5°	721.9	706.1	690.3	666.6	656.1	645.5	627.1	611.3	595.5	579.6	571.7
40°	664.0	645.5	627.1	606.0	595.5	582.3	566.5	550.7	534.9	521.7	511.1
42.5°	606.0	582.3	563.8	540.1	532.2	521.7	505.9	487.4	474.3	463.7	453.2
45°	540.1	524.3	503.2	482.2	471.6	463.7	447.9	432.1	418.9	408.4	400.5
47.5°	471.6	463.7	442.6	421.6	416.3	405.8	389.9	376.8	366.2	358.3	350.4
50°	408.4	403.1	389.9	368.9	361.0	353.1	339.9	329.3	318.8	310.9	305.6
52.5°	350.4	345.2	337.2	321.4	313.5	305.6	295.1	284.6	276.6	268.7	266.1
55°	297.7	292.5	284.6	274.0	268.7	260.8	252.9	245.0	237.1	234.5	229.2
57.5°	252.9	245.0	239.8	231.9	229.2	224.0	216.0	210.8	205.5	200.2	195.0
60°	213.4	208.1	202.9	197.6	195.0	192.3	184.4	179.2	173.9	171.3	166.0
62.5°	181.8	176.5	171.3	166.0	163.4	160.7	155.5	150.2	144.9	144.9	139.6
65°	152.8	147.5	144.9	139.6	137.0	134.4	129.1	126.5	121.2	118.6	115.9
67.5°	126.5	123.8	121.2	113.3	113.3	110.7	105.4	102.8	100.1	97.5	94.9
70°	102.8	100.1	97.5	94.9	92.2	89.6	86.9	84.3	79.0	79.0	76.4
72.5°	84.3	81.7	76.4	73.8	73.8	71.1	68.5	65.9	63.2	60.6	60.6
75°	65.9	63.2	60.6	58.0	55.3	55.3	52.7	50.1	50.1	47.4	44.8
77.5°	50.1	47.4	44.8	42.2	42.2	39.5	39.5	36.9	36.9	34.3	34.3
80°	34.3	34.3	31.6	31.6	29.0	29.0	26.3	26.3	26.3	23.7	23.7
82.5°	23.7	21.1	21.1	21.1	18.4	18.4	18.4	18.4	15.8	15.8	15.8
85°	13.2	13.2	10.5	10.5	10.5	10.5	10.5	10.5	10.5	7.9	7.9
87.5°	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
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°	1132.9	1132.9	1132.9	1132.9	1132.9	1132.9	1132.9	1132.9	1132.9	1132.9	1132.9
2.5°	1127.7	1125.0	1122.4	1122.4	1122.4	1119.8	1119.8	1117.1	1114.5	1114.5	1111.9
5°	1111.9	1109.2	1106.6	1104.0	1104.0	1098.7	1098.7	1096.1	1093.4	1090.8	1088.2
7.5°	1093.4	1088.2	1085.5	1080.2	1080.2	1077.6	1069.7	1067.1	1064.4	1059.2	1056.5
10°	1069.7	1061.8	1056.5	1053.9	1048.6	1046.0	1038.1	1035.5	1030.2	1027.6	1022.3
12.5°	1038.1	1030.2	1022.3	1019.6	1017.0	1009.1	1003.8	995.9	990.7	985.4	980.1
15°	1003.8	995.9	985.4	982.8	980.1	969.6	961.7	956.4	948.5	943.2	938.0
17.5°	964.3	953.8	943.2	940.6	935.3	924.8	919.5	911.6	901.1	895.8	890.5
20°	922.2	911.6	901.1	898.5	893.2	882.6	872.1	864.2	856.3	851.0	843.1
22.5°	874.7	864.2	851.0	845.8	843.1	829.9	822.0	814.1	806.2	795.7	790.4
25°	829.9	816.8	806.2	798.3	793.1	782.5	774.6	761.4	756.2	745.6	740.4
27.5°	779.9	766.7	756.2	748.3	743.0	735.1	721.9	711.4	703.5	695.6	690.3
30°	729.8	716.7	706.1	698.2	692.9	682.4	669.2	664.0	653.4	645.5	637.6
32.5°	677.1	664.0	650.8	648.1	640.2	629.7	621.8	611.3	603.4	595.5	587.6
35°	616.5	608.6	598.1	595.5	590.2	579.6	571.7	563.8	555.9	545.4	537.5
37.5°	558.6	548.0	542.8	537.5	534.9	529.6	521.7	513.8	505.9	498.0	495.3
40°	500.6	492.7	484.8	484.8	482.2	476.9	471.6	466.4	461.1	453.2	447.9
42.5°	445.3	437.4	434.7	429.5	426.8	424.2	418.9	416.3	413.7	408.4	403.1
45°	392.6	387.3	382.0	379.4	376.8	374.1	374.1	368.9	366.2	363.6	358.3
47.5°	342.5	339.9	337.2	334.6	332.0	332.0	326.7	324.1	321.4	321.4	316.2
50°	300.4	297.7	295.1	292.5	289.8	289.8	287.2	284.6	281.9	279.3	274.0
52.5°	263.5	260.8	255.6	255.6	255.6	252.9	250.3	247.7	245.0	242.4	239.8
55°	226.6	224.0	221.3	221.3	218.7	218.7	216.0	213.4	210.8	208.1	205.5
57.5°	195.0	192.3	189.7	189.7	187.1	187.1	184.4	181.8	176.5	173.9	171.3
60°	166.0	163.4	160.7	160.7	158.1	155.5	155.5	150.2	147.5	144.9	139.6
62.5°	137.0	134.4	134.4	131.7	131.7	131.7	129.1	123.8	121.2	115.9	113.3
65°	113.3	110.7	110.7	108.0	108.0	105.4	102.8	100.1	94.9	92.2	86.9
67.5°	92.2	92.2	89.6	86.9	86.9	84.3	81.7	76.4	73.8	68.5	65.9
70°	73.8	71.1	71.1	68.5	65.9	63.2	60.6	58.0	55.3	55.3	55.3
72.5°	58.0	55.3	55.3	52.7	52.7	47.4	44.8	44.8	44.8	44.8	44.8
75°	44.8	42.2	39.5	39.5	36.9	36.9	34.3	34.3	34.3	34.3	36.9
77.5°	31.6	31.6	29.0	29.0	26.3	26.3	26.3	26.3	26.3	26.3	29.0
80°	23.7	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1
82.5°	15.8	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	15.8
85°	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	10.5	7.9	7.9
87.5°	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
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: P238366

CATALOG NUMBER: PRS630D010-S6M24-61SWWMW-4000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1132.9	1132.9	1132.9	1132.9	1132.9	1132.9	1132.9	1132.9
2.5°	1111.9	1111.9	1111.9	1111.9	1111.9	1109.2	1111.9	1111.9
5°	1088.2	1085.5	1085.5	1082.9	1082.9	1082.9	1082.9	1080.2
7.5°	1053.9	1051.3	1051.3	1051.3	1048.6	1048.6	1046.0	1048.6
10°	1017.0	1014.4	1011.7	1014.4	1009.1	1009.1	1009.1	1009.1
12.5°	977.5	974.9	972.2	969.6	969.6	967.0	967.0	967.0
15°	932.7	930.1	927.4	924.8	924.8	919.5	919.5	916.9
17.5°	885.3	882.6	880.0	877.4	872.1	872.1	869.5	872.1
20°	835.2	829.9	827.3	827.3	824.7	822.0	819.4	819.4
22.5°	785.2	779.9	779.9	774.6	772.0	769.3	766.7	764.1
25°	732.5	727.2	727.2	721.9	719.3	716.7	716.7	714.0
27.5°	682.4	674.5	674.5	671.9	666.6	664.0	664.0	666.6
30°	632.3	627.1	624.4	619.2	616.5	613.9	611.3	613.9
32.5°	582.3	574.4	571.7	571.7	569.1	566.5	563.8	561.2
35°	532.2	529.6	524.3	521.7	516.4	516.4	513.8	513.8
37.5°	487.4	479.5	476.9	474.3	471.6	469.0	466.4	469.0
40°	440.0	434.7	429.5	429.5	424.2	421.6	418.9	421.6
42.5°	397.8	392.6	389.9	384.7	379.4	376.8	376.8	374.1
45°	355.7	347.8	347.8	339.9	337.2	334.6	332.0	332.0
47.5°	313.5	308.3	303.0	303.0	295.1	292.5	289.8	289.8
50°	274.0	266.1	263.5	260.8	255.6	250.3	247.7	247.7
52.5°	234.5	229.2	224.0	224.0	218.7	213.4	210.8	208.1
55°	200.2	195.0	192.3	187.1	184.4	176.5	173.9	173.9
57.5°	166.0	160.7	158.1	155.5	150.2	144.9	139.6	139.6
60°	137.0	131.7	131.7	126.5	121.2	115.9	110.7	110.7
62.5°	108.0	102.8	102.8	100.1	94.9	92.2	89.6	86.9
65°	84.3	79.0	79.0	79.0	79.0	79.0	76.4	79.0
67.5°	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9
70°	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3
72.5°	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8
75°	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9
77.5°	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0
80°	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1
82.5°	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8
85°	7.9	10.5	10.5	10.5	10.5	10.5	7.9	7.9
87.5°	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)