

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: P238353

Luminaire Tested: **PRS610D010-S6M12-61SWWMW-3000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238353  
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: PRS610D010-S6M12-61SWWMW-3000K  
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 / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 705.5 lumens  
Efficiency: N/A  
Efficacy: 70.6 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

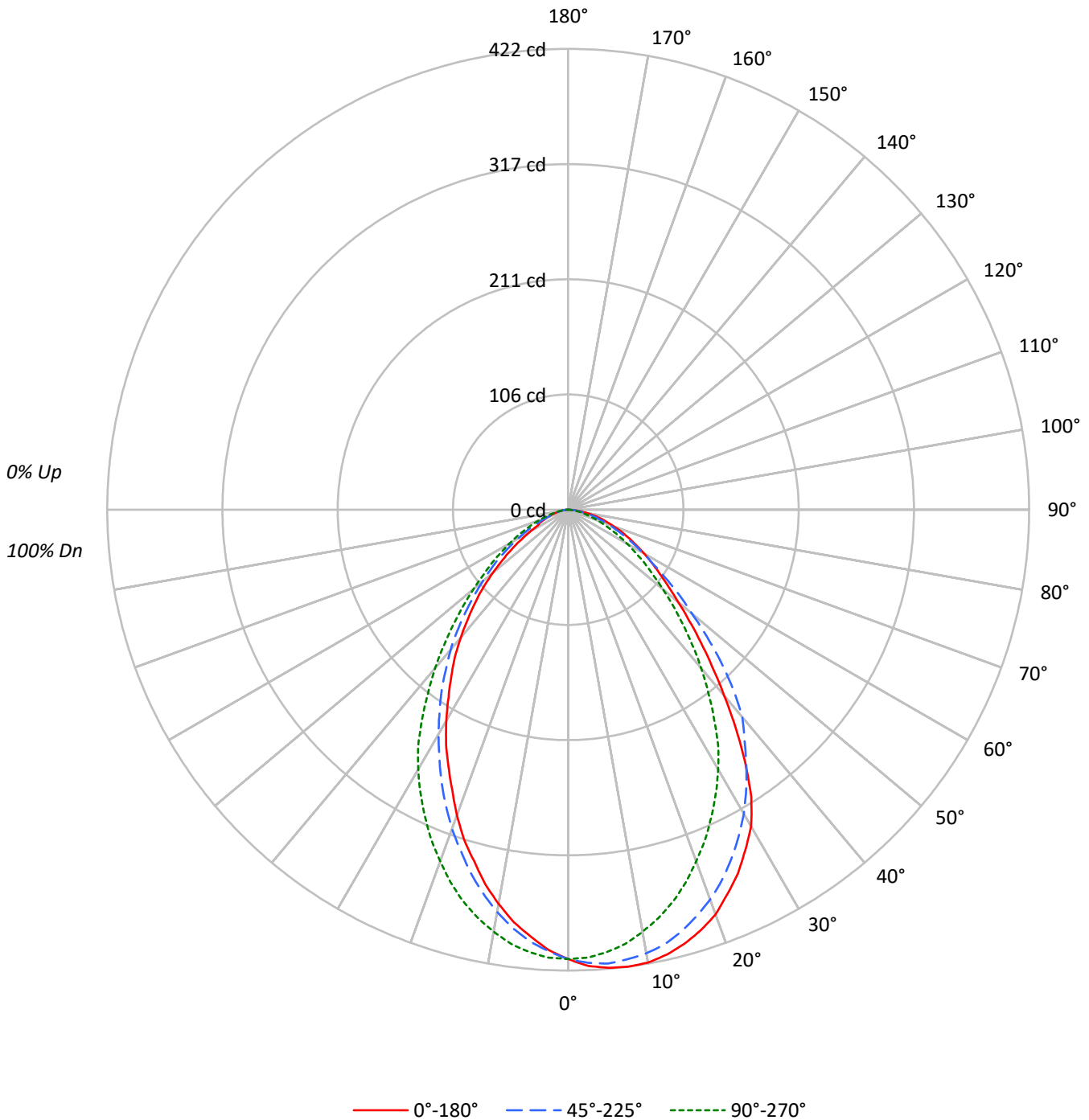
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P238353

CATALOG NUMBER: PRS610D010-S6M12-61SWWMW-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P238353

CATALOG NUMBER: PRS610D010-S6M12-61SWWMW-3000K

**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°	17717	17717	17717
5°	18200	17578	16960
10°	18410	17156	16023
15°	18342	16551	14843
20°	18066	15698	13636
25°	17459	14732	12318
30°	16650	13652	11087
35°	14838	12220	9808
40°	12478	10651	8605
45°	10430	9030	7343
50°	8781	7562	6028
55°	7687	6396	4744
60°	6923	5356	3462
65°	6235	4391	2924
70°	5539	3613	2530
75°	5090	2861	2229
80°	4265	2132	1909
85°	3310	1433	1433



TEST NUMBER: P238353

CATALOG NUMBER: PRS610D010-S6M12-61SWWMW-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.4	5.4
10°-20°	104.5	14.8
20°-30°	143.6	20.3
30°-40°	148.7	21.1
40°-50°	120.0	17.0
50°-60°	79.7	11.3
60°-70°	45.0	6.4
70°-80°	20.7	2.9
80°-90°	5.0	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°	286.4	40.6
0°-40°	435.2	61.7
0°-60°	634.9	90.0
0°-90°	705.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	705.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	412	412	412	412	412	
5°	421	417	407	397	392	40
15°	412	400	371	344	333	116
25°	368	353	310	275	259	169
35°	282	284	232	202	187	175
45°	171	198	148	133	121	133
55°	102	108	85	77	63	93
65°	61	56	43	34	29	61
75°	31	25	17	12	13	32
85°	7	5	3	4	3	8
90°	0	0	0	0	0	



TEST NUMBER: P238353

CATALOG NUMBER: PRS610D010-S6M12-61SWWMW-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	411.5	411.5	411.5	411.5	411.5	411.5	411.5	411.5	411.5	411.5	411.5
2.5°	418.2	417.2	417.2	417.2	417.2	417.2	417.2	417.2	416.3	416.3	415.3
5°	421.1	421.1	421.1	421.1	420.1	420.1	420.1	419.1	418.2	417.2	417.2
7.5°	422.0	422.0	422.0	421.1	421.1	421.1	420.1	419.1	418.2	417.2	415.3
10°	421.1	421.1	420.1	420.1	419.1	418.2	418.2	417.2	416.3	414.4	412.5
12.5°	417.2	417.2	417.2	416.3	415.3	415.3	414.4	412.5	411.5	409.6	407.7
15°	411.5	411.5	411.5	410.5	409.6	408.6	408.6	406.7	404.8	402.9	400.0
17.5°	403.8	403.8	403.8	402.9	401.0	401.0	400.0	398.1	396.2	394.3	390.4
20°	394.3	393.3	393.3	392.4	390.4	390.4	389.5	387.6	385.7	382.8	379.9
22.5°	380.9	381.8	380.9	379.9	379.0	378.0	377.0	375.1	373.2	370.3	367.5
25°	367.5	366.5	366.5	366.5	365.6	363.6	362.7	361.7	358.9	356.0	353.1
27.5°	351.2	349.3	349.3	350.2	349.3	348.3	347.4	345.5	343.5	340.7	337.8
30°	334.9	334.0	334.0	333.0	331.1	330.2	330.2	328.2	327.3	324.4	321.5
32.5°	312.0	312.9	313.9	314.8	313.9	313.9	313.9	311.0	308.1	306.2	303.4
35°	282.3	283.3	285.2	287.1	290.9	291.9	292.8	293.8	290.9	288.0	284.2
37.5°	251.7	253.6	254.6	257.4	260.3	263.2	264.1	267.9	270.8	269.9	265.1
40°	222.0	223.0	225.8	226.8	231.6	234.5	236.4	240.2	245.9	247.9	247.9
42.5°	195.2	196.2	197.1	200.0	203.8	207.7	208.6	212.4	219.1	222.0	223.9
45°	171.3	172.3	174.2	175.1	179.0	180.9	182.8	188.5	192.3	197.1	198.1
47.5°	150.2	150.2	151.2	154.1	156.9	158.9	159.8	164.6	168.4	171.3	172.3
50°	131.1	132.1	133.0	134.0	135.9	137.8	139.7	143.5	146.4	148.3	147.4
52.5°	115.8	116.7	116.7	117.7	119.6	121.5	122.5	124.4	126.3	127.3	128.2
55°	102.4	102.4	103.4	104.3	105.3	106.2	106.2	108.1	108.1	109.1	108.1
57.5°	90.9	90.9	90.9	91.9	91.9	92.8	92.8	92.8	92.8	92.8	91.9
60°	80.4	79.4	80.4	80.4	81.3	81.3	81.3	80.4	79.4	79.4	78.5
62.5°	69.9	69.9	69.9	70.8	70.8	69.9	69.9	69.9	67.9	67.9	67.0
65°	61.2	60.3	61.2	61.2	61.2	60.3	60.3	59.3	58.4	57.4	56.5
67.5°	52.6	52.6	52.6	52.6	51.7	51.7	51.7	49.8	48.8	47.8	46.9
70°	44.0	45.0	44.0	44.0	44.0	43.1	43.1	42.1	41.1	40.2	39.2
72.5°	37.3	37.3	37.3	36.4	36.4	35.4	35.4	34.5	33.5	32.5	31.6
75°	30.6	30.6	30.6	29.7	28.7	28.7	28.7	27.8	26.8	25.8	24.9
77.5°	23.9	23.9	23.0	23.0	22.0	22.0	22.0	21.1	20.1	19.1	19.1
80°	17.2	17.2	17.2	17.2	16.3	16.3	16.3	15.3	14.4	14.4	13.4
82.5°	11.5	12.4	11.5	11.5	10.5	10.5	10.5	10.5	9.6	9.6	9.6
85°	6.7	6.7	6.7	6.7	5.7	6.7	5.7	5.7	5.7	5.7	4.8
87.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
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: P238353

CATALOG NUMBER: PRS610D010-S6M12-61SWWMW-3000K

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	411.5	411.5	411.5	411.5	411.5	411.5	411.5	411.5	411.5	411.5	411.5
2.5°	415.3	414.4	414.4	413.4	413.4	412.5	412.5	411.5	411.5	410.5	409.6
5°	415.3	414.4	413.4	413.4	412.5	411.5	410.5	409.6	407.7	406.7	405.8
7.5°	414.4	413.4	411.5	409.6	408.6	407.7	406.7	404.8	402.9	401.0	399.1
10°	411.5	409.6	406.7	404.8	403.8	401.9	400.0	398.1	395.2	392.4	390.4
12.5°	405.8	402.9	400.0	397.1	396.2	394.3	391.4	388.5	385.7	382.8	379.9
15°	397.1	394.3	391.4	388.5	386.6	385.7	381.8	378.0	375.1	371.3	367.5
17.5°	387.6	384.7	380.9	377.0	375.1	373.2	370.3	365.6	362.7	357.9	355.0
20°	377.0	373.2	368.4	364.6	362.7	360.8	356.0	352.2	347.4	342.6	339.7
22.5°	363.6	358.9	355.0	351.2	348.3	346.4	341.6	336.9	332.1	327.3	322.5
25°	348.3	344.5	339.7	335.9	333.0	330.2	325.4	320.6	314.8	310.1	305.3
27.5°	334.0	329.2	324.4	318.7	316.8	312.9	308.1	303.4	297.6	292.8	287.1
30°	316.8	312.0	306.2	301.4	299.5	296.7	290.9	285.2	280.4	274.6	269.9
32.5°	299.5	294.7	290.0	284.2	281.3	277.5	271.8	266.0	260.3	255.5	249.8
35°	281.3	276.6	270.8	265.1	261.3	257.4	250.7	244.0	238.3	232.5	229.7
37.5°	262.2	256.5	250.7	242.1	238.3	234.5	227.8	222.0	216.3	210.5	207.7
40°	241.2	234.5	227.8	220.1	216.3	211.5	205.7	200.0	194.3	189.5	185.7
42.5°	220.1	211.5	204.8	196.2	193.3	189.5	183.7	177.0	172.3	168.4	164.6
45°	196.2	190.4	182.8	175.1	171.3	168.4	162.7	156.9	152.2	148.3	145.5
47.5°	171.3	168.4	160.8	153.1	151.2	147.4	141.6	136.8	133.0	130.1	127.3
50°	148.3	146.4	141.6	134.0	131.1	128.2	123.4	119.6	115.8	112.9	111.0
52.5°	127.3	125.4	122.5	116.7	113.9	111.0	107.2	103.4	100.5	97.6	96.7
55°	108.1	106.2	103.4	99.5	97.6	94.7	91.9	89.0	86.1	85.2	83.3
57.5°	91.9	89.0	87.1	84.2	83.3	81.3	78.5	76.6	74.6	72.7	70.8
60°	77.5	75.6	73.7	71.8	70.8	69.9	67.0	65.1	63.2	62.2	60.3
62.5°	66.0	64.1	62.2	60.3	59.3	58.4	56.5	54.5	52.6	52.6	50.7
65°	55.5	53.6	52.6	50.7	49.8	48.8	46.9	45.9	44.0	43.1	42.1
67.5°	45.9	45.0	44.0	41.1	41.1	40.2	38.3	37.3	36.4	35.4	34.5
70°	37.3	36.4	35.4	34.5	33.5	32.5	31.6	30.6	28.7	28.7	27.8
72.5°	30.6	29.7	27.8	26.8	26.8	25.8	24.9	23.9	23.0	22.0	22.0
75°	23.9	23.0	22.0	21.1	20.1	20.1	19.1	18.2	18.2	17.2	16.3
77.5°	18.2	17.2	16.3	15.3	15.3	14.4	14.4	13.4	13.4	12.4	12.4
80°	12.4	12.4	11.5	11.5	10.5	10.5	9.6	9.6	9.6	8.6	8.6
82.5°	8.6	7.7	7.7	7.7	6.7	6.7	6.7	6.7	5.7	5.7	5.7
85°	4.8	4.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	2.9	2.9
87.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
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: P238353

CATALOG NUMBER: PRS610D010-S6M12-61SWWMW-3000K

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	411.5	411.5	411.5	411.5	411.5	411.5	411.5	411.5	411.5	411.5	411.5
2.5°	409.6	408.6	407.7	407.7	407.7	406.7	406.7	405.8	404.8	404.8	403.8
5°	403.8	402.9	401.9	401.0	401.0	399.1	399.1	398.1	397.1	396.2	395.2
7.5°	397.1	395.2	394.3	392.4	392.4	391.4	388.5	387.6	386.6	384.7	383.7
10°	388.5	385.7	383.7	382.8	380.9	379.9	377.0	376.1	374.2	373.2	371.3
12.5°	377.0	374.2	371.3	370.3	369.4	366.5	364.6	361.7	359.8	357.9	356.0
15°	364.6	361.7	357.9	356.9	356.0	352.2	349.3	347.4	344.5	342.6	340.7
17.5°	350.2	346.4	342.6	341.6	339.7	335.9	334.0	331.1	327.3	325.4	323.5
20°	334.9	331.1	327.3	326.3	324.4	320.6	316.8	313.9	311.0	309.1	306.2
22.5°	317.7	313.9	309.1	307.2	306.2	301.4	298.6	295.7	292.8	289.0	287.1
25°	301.4	296.7	292.8	290.0	288.0	284.2	281.3	276.6	274.6	270.8	268.9
27.5°	283.3	278.5	274.6	271.8	269.9	267.0	262.2	258.4	255.5	252.6	250.7
30°	265.1	260.3	256.5	253.6	251.7	247.9	243.1	241.2	237.3	234.5	231.6
32.5°	245.9	241.2	236.4	235.4	232.5	228.7	225.8	222.0	219.1	216.3	213.4
35°	223.9	221.1	217.2	216.3	214.4	210.5	207.7	204.8	201.9	198.1	195.2
37.5°	202.9	199.0	197.1	195.2	194.3	192.3	189.5	186.6	183.7	180.9	179.9
40°	181.8	179.0	176.1	176.1	175.1	173.2	171.3	169.4	167.5	164.6	162.7
42.5°	161.7	158.9	157.9	156.0	155.0	154.1	152.2	151.2	150.2	148.3	146.4
45°	142.6	140.7	138.8	137.8	136.8	135.9	135.9	134.0	133.0	132.1	130.1
47.5°	124.4	123.4	122.5	121.5	120.6	120.6	118.7	117.7	116.7	116.7	114.8
50°	109.1	108.1	107.2	106.2	105.3	105.3	104.3	103.4	102.4	101.4	99.5
52.5°	95.7	94.7	92.8	92.8	92.8	91.9	90.9	90.0	89.0	88.0	87.1
55°	82.3	81.3	80.4	80.4	79.4	79.4	78.5	77.5	76.6	75.6	74.6
57.5°	70.8	69.9	68.9	68.9	67.9	67.9	67.0	66.0	64.1	63.2	62.2
60°	60.3	59.3	58.4	58.4	57.4	56.5	56.5	54.5	53.6	52.6	50.7
62.5°	49.8	48.8	48.8	47.8	47.8	47.8	46.9	45.0	44.0	42.1	41.1
65°	41.1	40.2	40.2	39.2	39.2	38.3	37.3	36.4	34.5	33.5	31.6
67.5°	33.5	33.5	32.5	31.6	31.6	30.6	29.7	27.8	26.8	24.9	23.9
70°	26.8	25.8	25.8	24.9	23.9	23.0	22.0	21.1	20.1	20.1	20.1
72.5°	21.1	20.1	20.1	19.1	19.1	17.2	16.3	16.3	16.3	16.3	16.3
75°	16.3	15.3	14.4	14.4	13.4	13.4	12.4	12.4	12.4	12.4	13.4
77.5°	11.5	11.5	10.5	10.5	9.6	9.6	9.6	9.6	9.6	9.6	10.5
80°	8.6	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
82.5°	5.7	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	5.7
85°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.8	2.9	2.9
87.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
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: P238353

CATALOG NUMBER: PRS610D010-S6M12-61SWWMW-3000K

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	411.5	411.5	411.5	411.5	411.5	411.5	411.5	411.5
2.5°	403.8	403.8	403.8	403.8	403.8	402.9	403.8	403.8
5°	395.2	394.3	394.3	393.3	393.3	393.3	393.3	392.4
7.5°	382.8	381.8	381.8	381.8	380.9	380.9	379.9	380.9
10°	369.4	368.4	367.5	368.4	366.5	366.5	366.5	366.5
12.5°	355.0	354.1	353.1	352.2	352.2	351.2	351.2	351.2
15°	338.8	337.8	336.9	335.9	335.9	334.0	334.0	333.0
17.5°	321.5	320.6	319.6	318.7	316.8	316.8	315.8	316.8
20°	303.4	301.4	300.5	300.5	299.5	298.6	297.6	297.6
22.5°	285.2	283.3	283.3	281.3	280.4	279.4	278.5	277.5
25°	266.0	264.1	264.1	262.2	261.3	260.3	260.3	259.3
27.5°	247.9	245.0	245.0	244.0	242.1	241.2	241.2	242.1
30°	229.7	227.8	226.8	224.9	223.9	223.0	222.0	223.0
32.5°	211.5	208.6	207.7	207.7	206.7	205.7	204.8	203.8
35°	193.3	192.3	190.4	189.5	187.6	187.6	186.6	186.6
37.5°	177.0	174.2	173.2	172.3	171.3	170.3	169.4	170.3
40°	159.8	157.9	156.0	156.0	154.1	153.1	152.2	153.1
42.5°	144.5	142.6	141.6	139.7	137.8	136.8	136.8	135.9
45°	129.2	126.3	126.3	123.4	122.5	121.5	120.6	120.6
47.5°	113.9	112.0	110.1	110.1	107.2	106.2	105.3	105.3
50°	99.5	96.7	95.7	94.7	92.8	90.9	90.0	90.0
52.5°	85.2	83.3	81.3	81.3	79.4	77.5	76.6	75.6
55°	72.7	70.8	69.9	67.9	67.0	64.1	63.2	63.2
57.5°	60.3	58.4	57.4	56.5	54.5	52.6	50.7	50.7
60°	49.8	47.8	47.8	45.9	44.0	42.1	40.2	40.2
62.5°	39.2	37.3	37.3	36.4	34.5	33.5	32.5	31.6
65°	30.6	28.7	28.7	28.7	28.7	28.7	27.8	28.7
67.5°	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9
70°	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1
72.5°	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3
75°	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4
77.5°	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
80°	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
82.5°	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
85°	2.9	3.8	3.8	3.8	3.8	3.8	2.9	2.9
87.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)