

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: P238365

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P238365
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: PRS620D010-S6M12-61SWWMW-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: 1590.7 lumens
Efficiency: N/A
Efficacy: 79.5 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

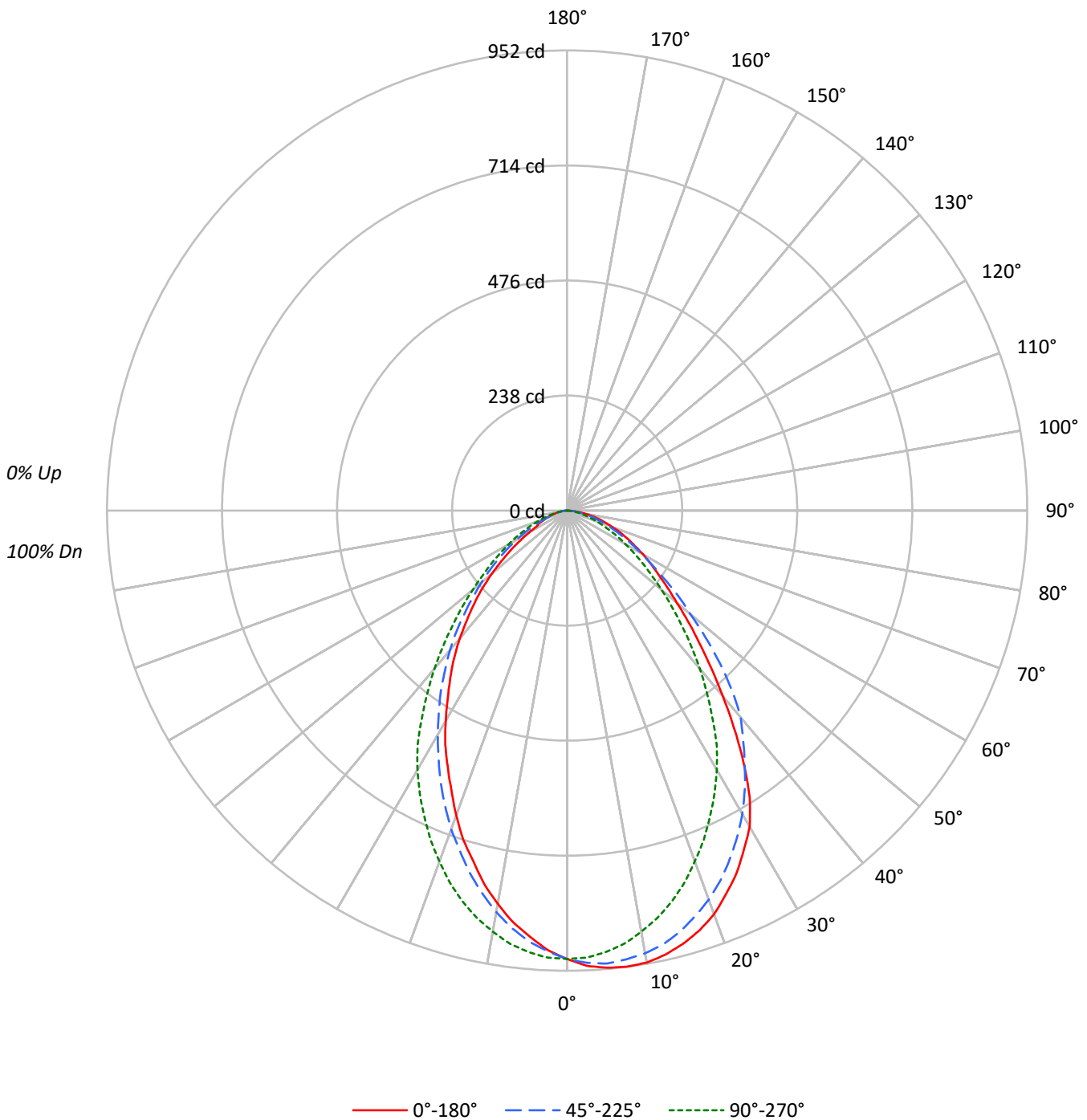
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P238365

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

Luminous Intensity Polar Plot





TEST NUMBER: P238365

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

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°	39943	39943	39943
5°	41029	39629	38233
10°	41503	38675	36126
15°	41352	37313	33467
20°	40728	35391	30744
25°	39359	33207	27777
30°	37541	30784	24992
35°	33455	27558	22113
40°	28131	24011	19402
45°	23516	20362	16550
50°	19800	17054	13584
55°	17333	14413	10689
60°	15603	12073	7802
65°	14069	9892	6592
70°	12488	8145	5703
75°	11478	6455	5024
80°	9620	4810	4289
85°	7460	3211	3211



TEST NUMBER: P238365

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.6	5.4
10°-20°	235.6	14.8
20°-30°	323.7	20.3
30°-40°	335.3	21.1
40°-50°	270.6	17.0
50°-60°	179.7	11.3
60°-70°	101.4	6.4
70°-80°	46.6	2.9
80°-90°	11.3	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°	645.8	40.6
0°-40°	981.1	61.7
0°-60°	1431.3	90.0
0°-90°	1590.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1590.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	928	928	928	928	928	
5°	949	941	917	895	885	91
15°	928	902	837	777	751	261
25°	828	796	699	619	585	380
35°	636	641	524	455	421	395
45°	386	447	334	300	272	300
55°	231	244	192	173	142	209
65°	138	127	97	78	65	137
75°	69	56	39	28	30	73
85°	15	11	6	9	6	18
90°	0	0	0	0	0	



TEST NUMBER: P238365

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	927.7	927.7	927.7	927.7	927.7	927.7	927.7	927.7	927.7	927.7	927.7
2.5°	942.8	940.7	940.7	940.7	940.7	940.7	940.7	940.7	938.5	938.5	936.4
5°	949.3	949.3	949.3	949.3	947.2	947.2	947.2	945.0	942.8	940.7	940.7
7.5°	951.5	951.5	951.5	949.3	949.3	949.3	947.2	945.0	942.8	940.7	936.4
10°	949.3	949.3	947.2	947.2	945.0	942.8	942.8	940.7	938.5	934.2	929.9
12.5°	940.7	940.7	940.7	938.5	936.4	936.4	934.2	929.9	927.7	923.4	919.1
15°	927.7	927.7	927.7	925.6	923.4	921.3	921.3	916.9	912.6	908.3	901.8
17.5°	910.5	910.5	910.5	908.3	904.0	904.0	901.8	897.5	893.2	888.9	880.3
20°	888.9	886.7	886.7	884.6	880.3	880.3	878.1	873.8	869.5	863.0	856.5
22.5°	858.7	860.9	858.7	856.5	854.4	852.2	850.1	845.7	841.4	835.0	828.5
25°	828.5	826.3	826.3	826.3	824.2	819.9	817.7	815.5	809.1	802.6	796.1
27.5°	791.8	787.5	787.5	789.7	787.5	785.3	783.2	778.9	774.6	768.1	761.6
30°	755.1	753.0	753.0	750.8	746.5	744.3	744.3	740.0	737.9	731.4	724.9
32.5°	703.4	705.5	707.7	709.8	707.7	707.7	707.7	701.2	694.7	690.4	683.9
35°	636.5	638.6	642.9	647.3	655.9	658.0	660.2	662.4	655.9	649.4	640.8
37.5°	567.4	571.7	573.9	580.4	586.8	593.3	595.5	604.1	610.6	608.4	597.6
40°	500.5	502.7	509.2	511.3	522.1	528.6	532.9	541.5	554.5	558.8	558.8
42.5°	440.1	442.3	444.5	450.9	459.6	468.2	470.3	479.0	494.1	500.5	504.9
45°	386.2	388.4	392.7	394.8	403.5	407.8	412.1	425.0	433.7	444.5	446.6
47.5°	338.7	338.7	340.9	347.4	353.8	358.1	360.3	371.1	379.7	386.2	388.4
50°	295.6	297.7	299.9	302.1	306.4	310.7	315.0	323.6	330.1	334.4	332.3
52.5°	261.1	263.2	263.2	265.4	269.7	274.0	276.2	280.5	284.8	287.0	289.1
55°	230.9	230.9	233.0	235.2	237.3	239.5	239.5	243.8	243.8	246.0	243.8
57.5°	205.0	205.0	205.0	207.1	207.1	209.3	209.3	209.3	209.3	209.3	207.1
60°	181.2	179.1	181.2	181.2	183.4	183.4	183.4	181.2	179.1	179.1	176.9
62.5°	157.5	157.5	157.5	159.7	159.7	157.5	157.5	157.5	153.2	153.2	151.0
65°	138.1	135.9	138.1	138.1	138.1	135.9	135.9	133.8	131.6	129.5	127.3
67.5°	118.7	118.7	118.7	118.7	116.5	116.5	116.5	112.2	110.0	107.9	105.7
70°	99.2	101.4	99.2	99.2	99.2	97.1	97.1	94.9	92.8	90.6	88.5
72.5°	84.1	84.1	84.1	82.0	82.0	79.8	79.8	77.7	75.5	73.4	71.2
75°	69.0	69.0	69.0	66.9	64.7	64.7	64.7	62.6	60.4	58.3	56.1
77.5°	53.9	53.9	51.8	51.8	49.6	49.6	49.6	47.5	45.3	43.2	43.2
80°	38.8	38.8	38.8	38.8	36.7	36.7	36.7	34.5	32.4	32.4	30.2
82.5°	25.9	28.0	25.9	25.9	23.7	23.7	23.7	23.7	21.6	21.6	21.6
85°	15.1	15.1	15.1	15.1	12.9	15.1	12.9	12.9	12.9	12.9	10.8
87.5°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
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: P238365

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

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	927.7	927.7	927.7	927.7	927.7	927.7	927.7	927.7	927.7	927.7	927.7
2.5°	936.4	934.2	934.2	932.1	932.1	929.9	929.9	927.7	927.7	925.6	923.4
5°	936.4	934.2	932.1	932.1	929.9	927.7	925.6	923.4	919.1	916.9	914.8
7.5°	934.2	932.1	927.7	923.4	921.3	919.1	916.9	912.6	908.3	904.0	899.7
10°	927.7	923.4	916.9	912.6	910.5	906.2	901.8	897.5	891.1	884.6	880.3
12.5°	914.8	908.3	901.8	895.4	893.2	888.9	882.4	876.0	869.5	863.0	856.5
15°	895.4	888.9	882.4	876.0	871.6	869.5	860.9	852.2	845.7	837.1	828.5
17.5°	873.8	867.3	858.7	850.1	845.7	841.4	835.0	824.2	817.7	806.9	800.4
20°	850.1	841.4	830.6	822.0	817.7	813.4	802.6	794.0	783.2	772.4	765.9
22.5°	819.9	809.1	800.4	791.8	785.3	781.0	770.2	759.4	748.7	737.9	727.1
25°	785.3	776.7	765.9	757.3	750.8	744.3	733.6	722.8	709.8	699.0	688.3
27.5°	753.0	742.2	731.4	718.5	714.1	705.5	694.7	683.9	671.0	660.2	647.3
30°	714.1	703.4	690.4	679.6	675.3	668.8	655.9	642.9	632.2	619.2	608.4
32.5°	675.3	664.5	653.7	640.8	634.3	625.7	612.7	599.8	586.8	576.1	563.1
35°	634.3	623.5	610.6	597.6	589.0	580.4	565.3	550.2	537.2	524.3	517.8
37.5°	591.2	578.2	565.3	545.9	537.2	528.6	513.5	500.5	487.6	474.7	468.2
40°	543.7	528.6	513.5	496.2	487.6	476.8	463.9	450.9	438.0	427.2	418.6
42.5°	496.2	476.8	461.7	442.3	435.8	427.2	414.2	399.1	388.4	379.7	371.1
45°	442.3	429.3	412.1	394.8	386.2	379.7	366.8	353.8	343.0	334.4	327.9
47.5°	386.2	379.7	362.5	345.2	340.9	332.3	319.3	308.5	299.9	293.4	287.0
50°	334.4	330.1	319.3	302.1	295.6	289.1	278.3	269.7	261.1	254.6	250.3
52.5°	287.0	282.6	276.2	263.2	256.7	250.3	241.6	233.0	226.5	220.1	217.9
55°	243.8	239.5	233.0	224.4	220.1	213.6	207.1	200.6	194.2	192.0	187.7
57.5°	207.1	200.6	196.3	189.9	187.7	183.4	176.9	172.6	168.3	164.0	159.7
60°	174.8	170.4	166.1	161.8	159.7	157.5	151.0	146.7	142.4	140.2	135.9
62.5°	148.9	144.6	140.2	135.9	133.8	131.6	127.3	123.0	118.7	118.7	114.3
65°	125.1	120.8	118.7	114.3	112.2	110.0	105.7	103.6	99.2	97.1	94.9
67.5°	103.6	101.4	99.2	92.8	92.8	90.6	86.3	84.1	82.0	79.8	77.7
70°	84.1	82.0	79.8	77.7	75.5	73.4	71.2	69.0	64.7	64.7	62.6
72.5°	69.0	66.9	62.6	60.4	60.4	58.3	56.1	53.9	51.8	49.6	49.6
75°	53.9	51.8	49.6	47.5	45.3	45.3	43.2	41.0	41.0	38.8	36.7
77.5°	41.0	38.8	36.7	34.5	34.5	32.4	32.4	30.2	30.2	28.0	28.0
80°	28.0	28.0	25.9	25.9	23.7	23.7	21.6	21.6	21.6	19.4	19.4
82.5°	19.4	17.3	17.3	17.3	15.1	15.1	15.1	15.1	12.9	12.9	12.9
85°	10.8	10.8	8.6	8.6	8.6	8.6	8.6	8.6	8.6	6.5	6.5
87.5°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
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: P238365

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

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	927.7	927.7	927.7	927.7	927.7	927.7	927.7	927.7	927.7	927.7	927.7
2.5°	923.4	921.3	919.1	919.1	919.1	916.9	916.9	914.8	912.6	912.6	910.5
5°	910.5	908.3	906.2	904.0	904.0	899.7	899.7	897.5	895.4	893.2	891.1
7.5°	895.4	891.1	888.9	884.6	884.6	882.4	876.0	873.8	871.6	867.3	865.2
10°	876.0	869.5	865.2	863.0	858.7	856.5	850.1	847.9	843.6	841.4	837.1
12.5°	850.1	843.6	837.1	835.0	832.8	826.3	822.0	815.5	811.2	806.9	802.6
15°	822.0	815.5	806.9	804.8	802.6	794.0	787.5	783.2	776.7	772.4	768.1
17.5°	789.7	781.0	772.4	770.2	765.9	757.3	753.0	746.5	737.9	733.6	729.2
20°	755.1	746.5	737.9	735.7	731.4	722.8	714.1	707.7	701.2	696.9	690.4
22.5°	716.3	707.7	696.9	692.6	690.4	679.6	673.1	666.7	660.2	651.6	647.3
25°	679.6	668.8	660.2	653.7	649.4	640.8	634.3	623.5	619.2	610.6	606.3
27.5°	638.6	627.8	619.2	612.7	608.4	601.9	591.2	582.5	576.1	569.6	565.3
30°	597.6	586.8	578.2	571.7	567.4	558.8	548.0	543.7	535.1	528.6	522.1
32.5°	554.5	543.7	532.9	530.8	524.3	515.6	509.2	500.5	494.1	487.6	481.1
35°	504.9	498.4	489.8	487.6	483.3	474.7	468.2	461.7	455.2	446.6	440.1
37.5°	457.4	448.8	444.5	440.1	438.0	433.7	427.2	420.7	414.2	407.8	405.6
40°	409.9	403.5	397.0	397.0	394.8	390.5	386.2	381.9	377.6	371.1	366.8
42.5°	364.6	358.1	356.0	351.7	349.5	347.4	343.0	340.9	338.7	334.4	330.1
45°	321.5	317.2	312.8	310.7	308.5	306.4	306.4	302.1	299.9	297.7	293.4
47.5°	280.5	278.3	276.2	274.0	271.8	271.8	267.5	265.4	263.2	263.2	258.9
50°	246.0	243.8	241.6	239.5	237.3	237.3	235.2	233.0	230.9	228.7	224.4
52.5°	215.8	213.6	209.3	209.3	209.3	207.1	205.0	202.8	200.6	198.5	196.3
55°	185.5	183.4	181.2	181.2	179.1	179.1	176.9	174.8	172.6	170.4	168.3
57.5°	159.7	157.5	155.3	155.3	153.2	153.2	151.0	148.9	144.6	142.4	140.2
60°	135.9	133.8	131.6	131.6	129.5	127.3	127.3	123.0	120.8	118.7	114.3
62.5°	112.2	110.0	110.0	107.9	107.9	107.9	105.7	101.4	99.2	94.9	92.8
65°	92.8	90.6	90.6	88.5	88.5	86.3	84.1	82.0	77.7	75.5	71.2
67.5°	75.5	75.5	73.4	71.2	71.2	69.0	66.9	62.6	60.4	56.1	53.9
70°	60.4	58.3	58.3	56.1	53.9	51.8	49.6	47.5	45.3	45.3	45.3
72.5°	47.5	45.3	45.3	43.2	43.2	38.8	36.7	36.7	36.7	36.7	36.7
75°	36.7	34.5	32.4	32.4	30.2	30.2	28.0	28.0	28.0	28.0	30.2
77.5°	25.9	25.9	23.7	23.7	21.6	21.6	21.6	21.6	21.6	21.6	23.7
80°	19.4	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3
82.5°	12.9	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	12.9
85°	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	8.6	6.5	6.5
87.5°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
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: P238365

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

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	927.7	927.7	927.7	927.7	927.7	927.7	927.7	927.7
2.5°	910.5	910.5	910.5	910.5	910.5	908.3	910.5	910.5
5°	891.1	888.9	888.9	886.7	886.7	886.7	886.7	884.6
7.5°	863.0	860.9	860.9	860.9	858.7	858.7	856.5	858.7
10°	832.8	830.6	828.5	830.6	826.3	826.3	826.3	826.3
12.5°	800.4	798.3	796.1	794.0	794.0	791.8	791.8	791.8
15°	763.8	761.6	759.4	757.3	757.3	753.0	753.0	750.8
17.5°	724.9	722.8	720.6	718.5	714.1	714.1	712.0	714.1
20°	683.9	679.6	677.5	677.5	675.3	673.1	671.0	671.0
22.5°	642.9	638.6	638.6	634.3	632.2	630.0	627.8	625.7
25°	599.8	595.5	595.5	591.2	589.0	586.8	586.8	584.7
27.5°	558.8	552.3	552.3	550.2	545.9	543.7	543.7	545.9
30°	517.8	513.5	511.3	507.0	504.9	502.7	500.5	502.7
32.5°	476.8	470.3	468.2	468.2	466.0	463.9	461.7	459.6
35°	435.8	433.7	429.3	427.2	422.9	422.9	420.7	420.7
37.5°	399.1	392.7	390.5	388.4	386.2	384.0	381.9	384.0
40°	360.3	356.0	351.7	351.7	347.4	345.2	343.0	345.2
42.5°	325.8	321.5	319.3	315.0	310.7	308.5	308.5	306.4
45°	291.3	284.8	284.8	278.3	276.2	274.0	271.8	271.8
47.5°	256.7	252.4	248.1	248.1	241.6	239.5	237.3	237.3
50°	224.4	217.9	215.8	213.6	209.3	205.0	202.8	202.8
52.5°	192.0	187.7	183.4	183.4	179.1	174.8	172.6	170.4
55°	164.0	159.7	157.5	153.2	151.0	144.6	142.4	142.4
57.5°	135.9	131.6	129.5	127.3	123.0	118.7	114.3	114.3
60°	112.2	107.9	107.9	103.6	99.2	94.9	90.6	90.6
62.5°	88.5	84.1	84.1	82.0	77.7	75.5	73.4	71.2
65°	69.0	64.7	64.7	64.7	64.7	64.7	62.6	64.7
67.5°	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9
70°	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3
72.5°	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7
75°	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2
77.5°	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7
80°	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3
82.5°	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9
85°	6.5	8.6	8.6	8.6	8.6	8.6	6.5	6.5
87.5°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)