

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: P238379

Luminaire Tested: **PRS615D010-S6M12-61SWWMB-4000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238379  
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: PRS615D010-S6M12-61SWWMB-4000K  
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 / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 892.3 lumens  
Efficiency: N/A  
Efficacy: 70.8 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

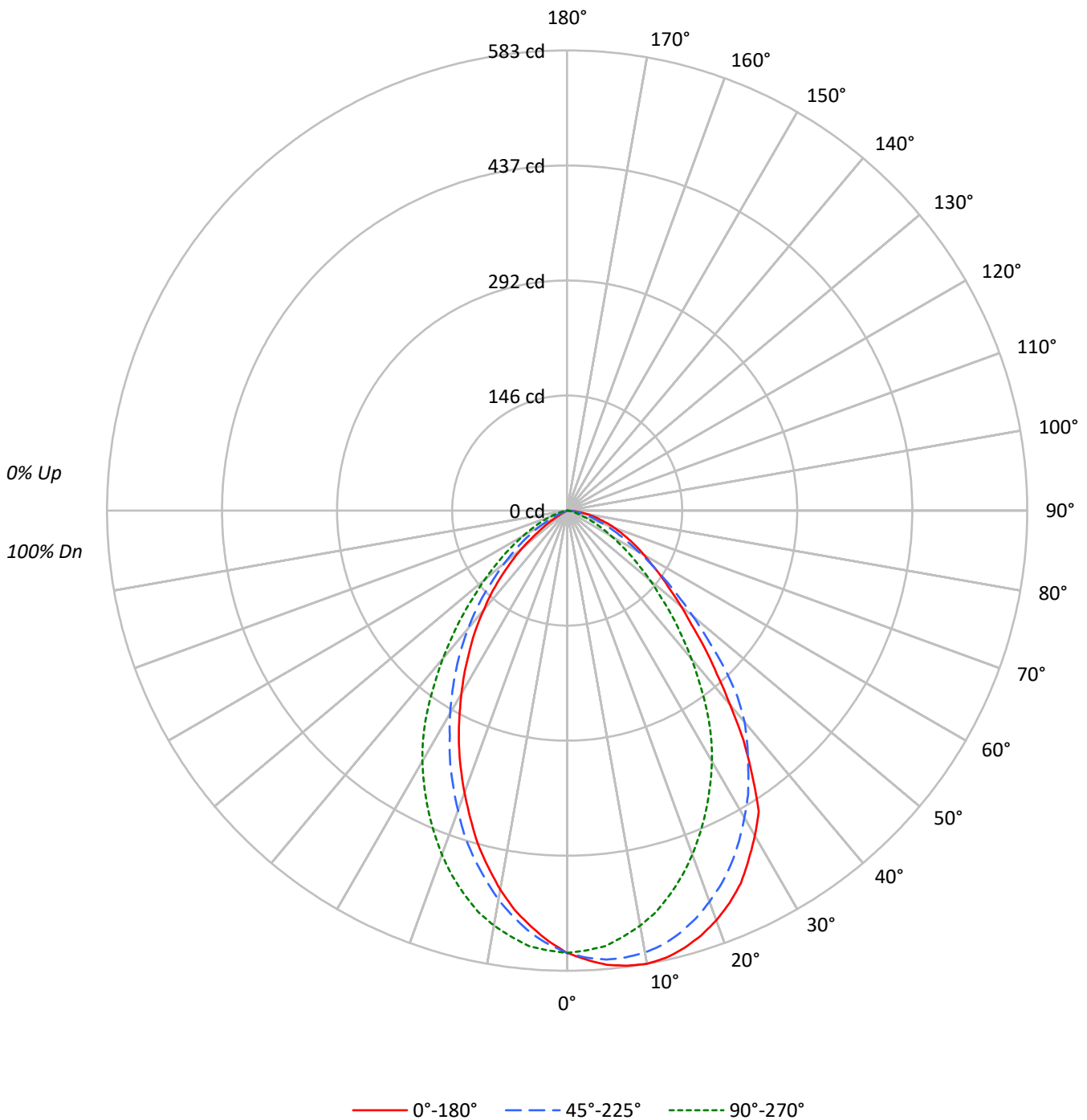
Input Watts (W): 12.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	24128	24128	24128
5°	24968	23935	22846
10°	25489	23342	21318
15°	25572	22443	19488
20°	25315	21246	17420
25°	24737	19825	15421
30°	23645	18246	13304
35°	21450	16226	11280
40°	18019	13776	9235
45°	15003	11374	7179
50°	12599	9143	5057
55°	10937	7259	2687
60°	9696	5589	680
65°	8772	4187	0
70°	8006	2832	0
75°	7053	1763	0
80°	6248	992	0
85°	4594	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.2	5.9
10°-20°	141.5	15.9
20°-30°	192.9	21.6
30°-40°	196.9	22.1
40°-50°	152.2	17.1
50°-60°	91.9	10.3
60°-70°	44.1	4.9
70°-80°	17.1	1.9
80°-90°	3.4	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°	386.7	43.3
0°-40°	583.6	65.4
0°-60°	827.7	92.8
0°-90°	892.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	892.3	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	560	560	560	560	560	
5°	578	571	554	537	529	55
15°	574	554	504	456	437	162
25°	521	493	417	351	325	239
35°	408	400	309	245	215	253
45°	246	281	187	147	118	191
55°	146	150	97	69	36	131
65°	86	73	41	16	0	86
75°	42	30	11	0	0	46
85°	9	5	0	0	0	11
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°	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4
2.5°	569.7	569.7	569.7	569.7	569.7	569.7	569.7	568.4	568.4	567.1	567.1
5°	577.7	577.7	577.7	576.3	576.3	575.0	575.0	573.7	573.7	571.0	571.0
7.5°	581.6	581.6	581.6	580.3	580.3	579.0	579.0	577.7	575.0	573.7	571.0
10°	583.0	583.0	581.6	581.6	579.0	579.0	579.0	576.3	573.7	571.0	568.4
12.5°	580.3	579.0	579.0	577.7	576.3	575.0	573.7	572.4	569.7	565.7	563.1
15°	573.7	573.7	573.7	572.4	569.7	568.4	568.4	565.7	561.8	557.8	553.8
17.5°	564.4	564.4	564.4	563.1	560.4	559.1	557.8	555.1	551.2	547.2	541.9
20°	552.5	552.5	551.2	549.8	547.2	547.2	545.9	541.9	537.9	532.6	527.3
22.5°	537.9	537.9	536.6	535.3	532.6	531.3	530.0	526.0	522.0	516.7	511.4
25°	520.7	519.4	518.0	516.7	515.4	512.7	511.4	508.8	504.8	498.2	492.9
27.5°	498.2	498.2	496.8	495.5	494.2	492.9	491.5	487.6	483.6	477.0	471.7
30°	475.6	475.6	474.3	473.0	471.7	470.3	467.7	463.7	461.1	455.8	449.1
32.5°	451.8	450.5	450.5	450.5	447.8	447.8	445.2	441.2	435.9	431.9	426.6
35°	408.1	409.4	410.7	414.7	416.0	418.7	418.7	417.3	412.0	406.7	400.1
37.5°	367.0	364.3	368.3	371.0	376.3	378.9	380.2	385.5	388.2	381.6	374.9
40°	320.6	323.3	325.9	329.9	335.2	336.5	340.5	344.5	351.1	353.7	349.8
42.5°	280.9	280.9	284.9	288.8	292.8	296.8	300.8	306.1	314.0	318.0	319.3
45°	246.4	245.1	246.4	251.7	257.0	259.7	262.3	269.0	276.9	282.2	280.9
47.5°	213.3	214.6	217.3	219.9	222.6	225.2	227.9	235.8	241.1	242.5	241.1
50°	188.1	186.8	189.5	190.8	194.8	196.1	198.7	202.7	206.7	208.0	208.0
52.5°	164.3	165.6	165.6	166.9	169.6	170.9	172.2	176.2	176.2	177.5	176.2
55°	145.7	144.4	145.7	147.1	148.4	149.7	151.0	151.0	151.0	151.0	149.7
57.5°	127.2	127.2	128.5	128.5	129.8	131.2	131.2	129.8	129.8	127.2	125.9
60°	112.6	112.6	112.6	112.6	113.9	113.9	113.9	111.3	108.6	108.6	104.7
62.5°	99.4	98.0	99.4	99.4	99.4	98.0	96.7	94.1	92.7	90.1	87.4
65°	86.1	86.1	86.1	86.1	84.8	84.8	83.5	80.8	78.2	76.8	72.9
67.5°	74.2	74.2	74.2	74.2	72.9	71.5	70.2	67.6	64.9	63.6	59.6
70°	63.6	62.3	62.3	62.3	60.9	59.6	58.3	57.0	54.3	51.7	49.0
72.5°	53.0	53.0	51.7	51.7	50.3	49.0	47.7	46.4	43.7	41.1	38.4
75°	42.4	42.4	42.4	41.1	39.7	39.7	38.4	35.8	34.4	31.8	30.5
77.5°	34.4	33.1	33.1	31.8	30.5	30.5	29.1	27.8	26.5	25.2	22.5
80°	25.2	25.2	25.2	23.8	22.5	22.5	21.2	19.9	18.5	17.2	15.9
82.5°	17.2	17.2	17.2	15.9	15.9	14.6	14.6	13.2	13.2	11.9	10.6
85°	9.3	9.3	9.3	9.3	9.3	7.9	7.9	7.9	6.6	6.6	5.3
87.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	1.3	1.3
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°	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4
2.5°	565.7	565.7	564.4	563.1	563.1	561.8	560.4	560.4	559.1	557.8	556.5
5°	568.4	567.1	564.4	563.1	561.8	561.8	559.1	556.5	555.1	553.8	551.2
7.5°	568.4	565.7	563.1	560.4	559.1	557.8	553.8	551.2	548.5	544.5	541.9
10°	565.7	561.8	557.8	553.8	552.5	549.8	545.9	543.2	537.9	533.9	530.0
12.5°	559.1	555.1	549.8	544.5	541.9	539.2	533.9	530.0	524.7	520.7	515.4
15°	549.8	544.5	539.2	533.9	530.0	528.6	522.0	515.4	510.1	503.5	496.8
17.5°	536.6	531.3	524.7	519.4	515.4	512.7	504.8	498.2	491.5	484.9	478.3
20°	522.0	515.4	508.8	500.8	498.2	494.2	486.2	478.3	470.3	463.7	455.8
22.5°	504.8	498.2	490.2	483.6	478.3	474.3	466.4	457.1	449.1	441.2	433.2
25°	484.9	478.3	470.3	462.4	457.1	453.1	443.8	434.6	426.6	417.3	409.4
27.5°	465.0	457.1	449.1	438.5	434.6	429.3	420.0	410.7	401.4	392.2	382.9
30°	442.5	433.2	425.3	414.7	410.7	405.4	394.8	385.5	376.3	367.0	356.4
32.5°	418.7	409.4	400.1	390.8	385.5	380.2	371.0	360.4	348.4	339.2	331.2
35°	392.2	384.2	374.9	364.3	357.7	352.4	339.2	328.6	316.6	308.7	299.4
37.5°	368.3	357.7	345.8	332.5	325.9	319.3	306.1	295.5	286.2	275.6	267.6
40°	339.2	327.2	314.0	298.1	294.1	287.5	275.6	263.7	254.4	245.1	237.2
42.5°	307.4	294.1	282.2	269.0	262.3	255.7	243.8	231.9	222.6	214.6	206.7
45°	275.6	263.7	250.4	237.2	230.5	225.2	213.3	202.7	194.8	186.8	180.2
47.5°	239.8	231.9	219.9	208.0	200.1	194.8	185.5	176.2	166.9	159.0	155.0
50°	205.4	200.1	190.8	178.9	173.6	168.3	157.7	149.7	143.1	136.5	131.2
52.5°	173.6	169.6	163.0	152.4	148.4	141.8	133.8	127.2	120.6	115.3	111.3
55°	147.1	141.8	136.5	129.8	124.5	121.9	112.6	107.3	102.0	96.7	92.7
57.5°	121.9	119.2	113.9	108.6	104.7	100.7	94.1	88.8	84.8	79.5	76.8
60°	103.3	98.0	94.1	88.8	86.1	83.5	78.2	72.9	68.9	64.9	62.3
62.5°	84.8	80.8	76.8	71.5	70.2	67.6	63.6	58.3	55.6	51.7	49.0
65°	70.2	66.2	63.6	58.3	57.0	54.3	50.3	46.4	43.7	41.1	38.4
67.5°	57.0	54.3	50.3	46.4	45.0	42.4	38.4	35.8	33.1	30.5	29.1
70°	46.4	43.7	39.7	35.8	34.4	33.1	29.1	27.8	25.2	22.5	21.2
72.5°	37.1	34.4	30.5	27.8	26.5	25.2	22.5	19.9	18.5	15.9	14.6
75°	27.8	25.2	22.5	19.9	18.5	18.5	15.9	14.6	13.2	10.6	9.3
77.5°	21.2	18.5	15.9	14.6	13.2	11.9	10.6	9.3	7.9	6.6	5.3
80°	14.6	13.2	10.6	9.3	9.3	7.9	6.6	6.6	5.3	4.0	2.6
82.5°	9.3	7.9	6.6	5.3	5.3	5.3	4.0	2.6	2.6	2.6	1.3
85°	4.0	4.0	2.6	2.6	2.6	2.6	1.3	1.3	1.3	0.0	0.0
87.5°	1.3	1.3	0.0	1.3	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°	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4
2.5°	556.5	555.1	553.8	553.8	552.5	552.5	551.2	551.2	549.8	549.8	548.5
5°	548.5	547.2	544.5	544.5	543.2	541.9	539.2	537.9	536.6	535.3	533.9
7.5°	539.2	535.3	532.6	531.3	530.0	527.3	524.7	522.0	519.4	518.0	515.4
10°	524.7	520.7	518.0	516.7	514.1	510.1	507.4	503.5	500.8	498.2	495.5
12.5°	510.1	504.8	499.5	498.2	495.5	490.2	487.6	482.3	478.3	475.6	473.0
15°	491.5	486.2	479.6	477.0	475.6	469.0	465.0	461.1	455.8	451.8	449.1
17.5°	470.3	465.0	458.4	454.4	451.8	446.5	439.9	435.9	431.9	425.3	422.6
20°	449.1	441.2	434.6	431.9	427.9	421.3	416.0	410.7	404.1	400.1	394.8
22.5°	424.0	417.3	409.4	405.4	402.8	394.8	389.5	382.9	377.6	373.6	367.0
25°	401.4	392.2	384.2	380.2	376.3	369.6	361.7	356.4	351.1	345.8	340.5
27.5°	374.9	365.7	357.7	355.1	351.1	341.8	336.5	328.6	321.9	318.0	312.7
30°	348.4	339.2	331.2	327.2	323.3	315.3	308.7	302.1	296.8	291.5	286.2
32.5°	321.9	314.0	306.1	302.1	298.1	290.2	283.5	275.6	270.3	263.7	258.4
35°	291.5	283.5	276.9	272.9	270.3	263.7	257.0	250.4	245.1	238.5	233.2
37.5°	259.7	251.7	247.8	243.8	241.1	235.8	230.5	225.2	219.9	214.6	208.0
40°	229.2	225.2	217.3	216.0	213.3	208.0	204.0	198.7	194.8	189.5	184.2
42.5°	201.4	194.8	189.5	188.1	185.5	181.5	177.5	173.6	170.9	165.6	161.6
45°	174.9	169.6	164.3	161.6	160.3	156.3	152.4	149.7	147.1	143.1	139.1
47.5°	149.7	144.4	140.4	139.1	136.5	133.8	129.8	127.2	123.2	120.6	116.6
50°	127.2	123.2	119.2	117.9	115.3	113.9	110.0	107.3	103.3	99.4	96.7
52.5°	107.3	103.3	100.7	99.4	98.0	94.1	91.4	88.8	84.8	82.1	78.2
55°	88.8	86.1	83.5	82.1	80.8	78.2	75.5	71.5	68.9	64.9	60.9
57.5°	72.9	70.2	67.6	66.2	64.9	62.3	59.6	57.0	53.0	49.0	45.0
60°	58.3	57.0	54.3	53.0	51.7	49.0	46.4	42.4	39.7	34.4	31.8
62.5°	46.4	45.0	42.4	41.1	39.7	35.8	33.1	30.5	26.5	22.5	18.5
65°	35.8	33.1	30.5	30.5	29.1	26.5	22.5	18.5	15.9	11.9	7.9
67.5°	26.5	23.8	21.2	21.2	19.9	17.2	13.2	10.6	6.6	4.0	0.0
70°	18.5	17.2	14.6	13.2	11.9	9.3	6.6	4.0	1.3	0.0	0.0
72.5°	13.2	10.6	9.3	7.9	6.6	4.0	1.3	0.0	0.0	0.0	0.0
75°	7.9	6.6	4.0	4.0	2.6	1.3	0.0	0.0	0.0	0.0	0.0
77.5°	4.0	4.0	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	2.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	1.3	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: P238379

CATALOG NUMBER: PRS615D010-S6M12-61SWWMB-4000K

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4
2.5°	548.5	547.2	547.2	547.2	547.2	547.2	545.9	545.9
5°	532.6	531.3	531.3	530.0	530.0	530.0	528.6	528.6
7.5°	514.1	512.7	511.4	511.4	510.1	510.1	508.8	510.1
10°	492.9	490.2	490.2	490.2	488.9	487.6	487.6	487.6
12.5°	470.3	467.7	466.4	465.0	463.7	463.7	462.4	462.4
15°	445.2	442.5	441.2	439.9	438.5	437.2	435.9	437.2
17.5°	418.7	416.0	414.7	413.4	410.7	410.7	409.4	408.1
20°	390.8	388.2	386.9	385.5	384.2	382.9	381.6	380.2
22.5°	363.0	361.7	357.7	357.7	355.1	353.7	352.4	352.4
25°	335.2	332.5	331.2	328.6	325.9	324.6	324.6	324.6
27.5°	307.4	304.7	302.1	300.8	299.4	298.1	295.5	295.5
30°	280.9	276.9	274.3	274.3	271.6	269.0	269.0	267.6
32.5°	254.4	250.4	247.8	246.4	245.1	242.5	241.1	241.1
35°	227.9	223.9	222.6	219.9	217.3	217.3	213.3	214.6
37.5°	204.0	198.7	197.4	196.1	192.1	190.8	189.5	190.8
40°	178.9	174.9	172.2	170.9	168.3	165.6	164.3	164.3
42.5°	155.0	152.4	149.7	148.4	144.4	141.8	140.4	141.8
45°	133.8	129.8	128.5	125.9	121.9	119.2	117.9	117.9
47.5°	112.6	110.0	106.0	104.7	100.7	98.0	95.4	95.4
50°	92.7	88.8	86.1	83.5	80.8	76.8	74.2	75.5
52.5°	74.2	68.9	67.6	64.9	60.9	57.0	54.3	54.3
55°	57.0	53.0	50.3	49.0	43.7	39.7	37.1	35.8
57.5°	41.1	37.1	35.8	33.1	29.1	25.2	21.2	21.2
60°	27.8	23.8	21.2	19.9	15.9	13.2	9.3	7.9
62.5°	14.6	11.9	9.3	7.9	5.3	2.6	2.6	1.3
65°	4.0	1.3	1.3	1.3	1.3	1.3	1.3	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)