

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: P238328

Luminaire Tested: **PRS610D010-S6M12-61SWWC**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238328  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-25)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS610D010-S6M12-61SWWC  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" WALL WASH DISTRIBUTION, WW TRIM SPECULAR  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 738.0 lumens  
Efficiency: N/A  
Efficacy: 73.8 lumens/watt  
Spacing Criteria (0/90/45): 0.98 / 0.94 / 1.03  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
CIE Type: Direct

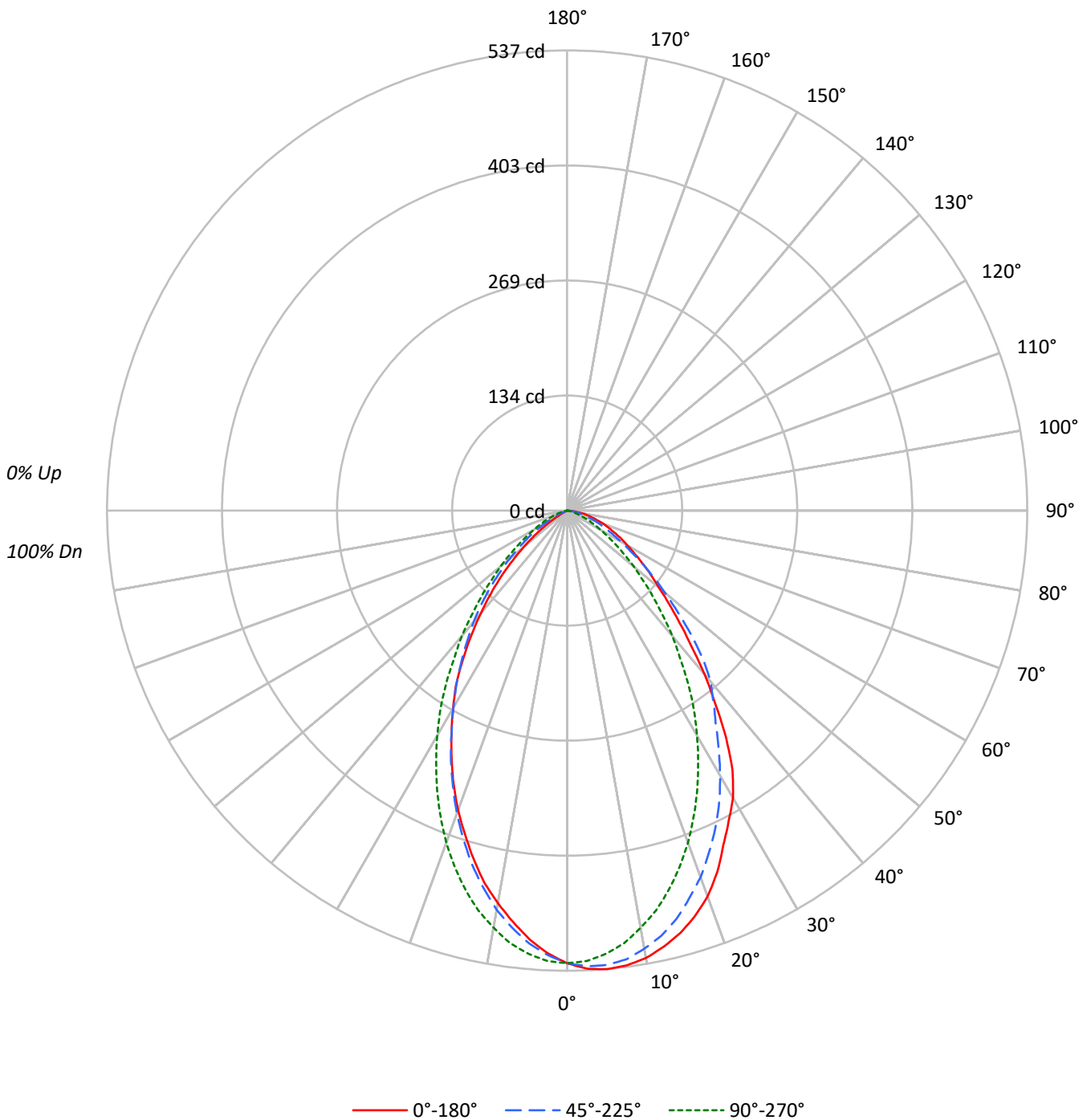
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P238328

CATALOG NUMBER: PRS610D010-S6M12-61SWWC

### 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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90					90			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80					80			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	74	80	76	73	71					71			
4	91	81	74	69	89	80	73	68	78	72	67	75	71	67	73	69	66	64					64			
5	85	74	67	62	83	73	66	61	71	65	61	69	64	60	68	63	60	58					58			
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52					52			
7	74	63	56	50	73	62	55	50	61	55	50	60	54	50	58	53	49	48					48			
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44					44			
9	66	54	47	42	65	54	47	42	53	47	42	52	46	42	51	46	42	40					40			
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	48	42	39	37					37			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	22742	22742	22742
5°	23218	22440	21705
10°	23180	21606	20338
15°	22742	20424	18775
20°	21956	18887	17049
25°	20485	17060	15159
30°	19250	15069	13230
35°	16983	12935	11148
40°	14001	10741	8830
45°	11332	8592	6637
50°	9384	6765	4421
55°	8032	5180	2402
60°	6975	3875	689
65°	6215	2853	0
70°	5665	1888	0
75°	4824	1164	0
80°	4215	744	0
85°	2964	494	0



TEST NUMBER: P238328

CATALOG NUMBER: PRS610D010-S6M12-61SWWC

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.9	6.6
10°-20°	129.1	17.5
20°-30°	167.7	22.7
30°-40°	161.2	21.8
40°-50°	118.6	16.1
50°-60°	68.1	9.2
60°-70°	30.8	4.2
70°-80°	11.5	1.6
80°-90°	2.2	0.3
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°	345.6	46.8
0°-40°	506.8	68.7
0°-60°	693.4	94.0
0°-90°	738.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	738.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	528	528	528	528	528	
5°	537	532	519	507	502	51
15°	510	493	458	428	421	143
25°	431	409	359	321	319	199
35°	323	302	246	215	212	200
45°	186	204	141	126	109	145
55°	107	105	69	56	32	97
65°	61	49	28	12	0	61
75°	29	20	7	0	0	31
85°	6	3	1	0	0	7
90°	0	0	0	0	0	



TEST NUMBER: P238328

CATALOG NUMBER: PRS610D010-S6M12-61SWWC

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	528.2	528.2	528.2	528.2	528.2	528.2	528.2	528.2	528.2	528.2	528.2
2.5°	535.2	535.2	535.2	534.2	534.2	535.2	534.2	534.2	533.2	533.2	532.2
5°	537.2	537.2	537.2	537.2	536.2	536.2	536.2	535.2	534.2	533.2	532.2
7.5°	535.2	535.2	535.2	535.2	534.2	534.2	533.2	532.2	531.2	529.2	528.2
10°	530.2	530.2	530.2	529.2	528.2	527.2	527.2	525.2	523.2	521.2	519.2
12.5°	521.2	521.2	520.2	520.2	518.2	518.2	517.2	515.2	513.2	511.2	508.2
15°	510.2	509.2	509.2	508.2	506.2	505.2	504.2	501.2	498.2	495.2	493.2
17.5°	496.2	495.2	494.2	493.2	490.2	488.2	487.2	484.2	481.2	478.2	474.2
20°	479.2	478.2	477.2	475.2	473.2	471.2	469.2	466.2	462.2	458.2	455.2
22.5°	457.2	456.2	455.2	454.2	451.2	449.2	448.2	445.2	441.2	437.2	432.2
25°	431.2	431.2	432.2	429.2	427.2	425.2	425.2	422.2	418.2	413.2	409.2
27.5°	408.2	408.2	406.2	404.2	401.2	399.2	398.2	395.2	393.2	389.2	384.2
30°	387.2	386.2	384.2	382.2	379.2	376.1	373.1	369.1	365.1	361.1	357.1
32.5°	359.1	358.1	358.1	358.1	355.1	354.1	352.1	347.1	342.1	335.1	329.1
35°	323.1	322.1	321.1	322.1	324.1	325.1	326.1	324.1	319.1	311.1	302.1
37.5°	284.1	285.1	286.1	287.1	290.1	292.1	291.1	295.1	294.1	289.1	280.1
40°	249.1	249.1	250.1	253.1	256.1	257.1	258.1	262.1	262.1	263.1	260.1
42.5°	214.1	217.1	218.1	220.1	223.1	225.1	227.1	231.1	232.1	236.1	234.1
45°	186.1	188.1	190.1	192.1	195.1	197.1	198.1	201.1	204.1	206.1	204.1
47.5°	161.1	162.1	163.1	165.1	168.1	169.1	171.1	174.1	177.1	176.1	174.1
50°	140.1	141.1	141.1	144.1	146.1	147.1	147.1	151.1	151.1	151.1	149.1
52.5°	123.0	123.0	124.0	125.0	127.1	127.1	129.1	131.1	129.1	128.1	126.1
55°	107.0	107.0	108.0	109.0	109.0	110.0	111.0	111.0	109.0	107.0	105.0
57.5°	93.0	94.0	94.0	95.0	96.0	95.0	96.0	94.0	92.0	90.0	87.0
60°	81.0	82.0	82.0	83.0	83.0	83.0	82.0	80.0	77.0	75.0	72.0
62.5°	71.0	71.0	71.0	71.0	71.0	71.0	70.0	68.0	65.0	63.0	60.0
65°	61.0	61.0	61.0	61.0	60.0	60.0	59.0	57.0	54.0	52.0	49.0
67.5°	52.0	52.0	52.0	52.0	51.0	50.0	49.0	48.0	45.0	43.0	41.0
70°	45.0	44.0	44.0	43.0	42.0	41.0	41.0	39.0	37.0	35.0	33.0
72.5°	36.0	36.0	36.0	36.0	34.0	34.0	33.0	31.0	29.0	28.0	26.0
75°	29.0	29.0	29.0	28.0	27.0	27.0	26.0	25.0	23.0	22.0	20.0
77.5°	23.0	23.0	23.0	22.0	21.0	20.0	20.0	19.0	17.0	16.0	15.0
80°	17.0	17.0	16.0	15.0	15.0	14.0	14.0	13.0	12.0	11.0	10.0
82.5°	11.0	11.0	11.0	10.0	10.0	9.0	9.0	9.0	8.0	7.0	6.0
85°	6.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0	4.0	4.0	3.0
87.5°	1.0	1.0	1.0	1.0	1.0	2.0	1.0	1.0	1.0	1.0	1.0
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: P238328

CATALOG NUMBER: PRS610D010-S6M12-61SWWC

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	528.2	528.2	528.2	528.2	528.2	528.2	528.2	528.2	528.2	528.2	528.2
2.5°	532.2	531.2	530.2	530.2	529.2	529.2	528.2	527.2	526.2	526.2	525.2
5°	531.2	530.2	528.2	527.2	526.2	525.2	524.2	522.2	521.2	519.2	518.2
7.5°	526.2	524.2	522.2	520.2	519.2	518.2	515.2	513.2	511.2	509.2	507.2
10°	517.2	515.2	512.2	510.2	508.2	506.2	504.2	500.2	497.2	494.2	491.2
12.5°	505.2	502.2	499.2	495.2	494.2	492.2	489.2	485.2	482.2	478.2	474.2
15°	490.2	485.2	483.2	478.2	476.2	474.2	471.2	467.2	463.2	458.2	454.2
17.5°	470.2	465.2	463.2	458.2	456.2	454.2	449.2	445.2	441.2	436.2	431.2
20°	450.2	446.2	441.2	436.2	434.2	432.2	426.2	422.2	418.2	412.2	408.2
22.5°	427.2	422.2	417.2	413.2	410.2	408.2	403.2	398.2	392.2	386.2	381.2
25°	404.2	398.2	393.2	388.2	384.2	382.2	376.1	370.1	364.1	359.1	353.1
27.5°	378.2	373.1	367.1	360.1	357.1	354.1	348.1	341.1	336.1	331.1	325.1
30°	351.1	346.1	339.1	333.1	330.1	327.1	321.1	315.1	310.1	303.1	297.1
32.5°	324.1	319.1	313.1	307.1	305.1	301.1	294.1	289.1	282.1	275.1	270.1
35°	298.1	294.1	288.1	281.1	276.1	272.1	265.1	257.1	251.1	246.1	241.1
37.5°	274.1	268.1	260.1	251.1	246.1	242.1	233.1	227.1	222.1	216.1	214.1
40°	249.1	239.1	230.1	221.1	217.1	212.1	205.1	199.1	195.1	191.1	186.1
42.5°	225.1	212.1	202.1	194.1	189.1	186.1	178.1	174.1	169.1	164.1	162.1
45°	198.1	188.1	176.1	168.1	164.1	161.1	154.1	149.1	144.1	141.1	138.1
47.5°	171.1	163.1	152.1	143.1	140.1	137.1	132.1	126.1	122.0	119.0	116.0
50°	144.1	138.1	132.1	122.0	119.0	118.0	112.0	107.0	103.0	101.0	98.0
52.5°	122.0	117.0	111.0	104.0	101.0	98.0	94.0	89.0	87.0	84.0	82.0
55°	101.0	96.0	93.0	88.0	84.0	82.0	78.0	75.0	72.0	69.0	67.0
57.5°	83.0	80.0	77.0	73.0	71.0	69.0	65.0	62.0	59.0	56.0	54.0
60°	69.0	66.0	63.0	60.0	58.0	57.0	53.0	50.0	47.0	45.0	43.0
62.5°	57.0	55.0	52.0	49.0	47.0	46.0	43.0	40.0	37.0	36.0	34.0
65°	47.0	45.0	42.0	39.0	39.0	37.0	34.0	32.0	30.0	28.0	26.0
67.5°	39.0	36.0	34.0	32.0	30.0	29.0	27.0	25.0	23.0	21.0	20.0
70°	31.0	29.0	27.0	24.0	23.0	22.0	20.0	18.0	17.0	15.0	14.0
72.5°	24.0	22.0	20.0	18.0	17.0	16.0	15.0	13.0	12.0	11.0	10.0
75°	19.0	17.0	15.0	13.0	13.0	12.0	11.0	9.0	8.0	7.0	7.0
77.5°	13.0	12.0	11.0	9.0	9.0	8.0	7.0	6.0	6.0	5.0	4.0
80°	9.0	8.0	7.0	6.0	5.0	5.0	4.0	4.0	3.0	3.0	2.0
82.5°	6.0	5.0	4.0	3.0	3.0	3.0	2.0	2.0	2.0	1.0	1.0
85°	3.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
87.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
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: P238328

CATALOG NUMBER: PRS610D010-S6M12-61SWWC

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	528.2	528.2	528.2	528.2	528.2	528.2	528.2	528.2	528.2	528.2	528.2
2.5°	524.2	523.2	522.2	522.2	522.2	521.2	520.2	519.2	519.2	518.2	518.2
5°	516.2	514.2	513.2	512.2	512.2	510.2	509.2	508.2	507.2	506.2	505.2
7.5°	504.2	502.2	500.2	498.2	498.2	496.2	494.2	493.2	491.2	490.2	489.2
10°	489.2	487.2	484.2	482.2	480.2	479.2	476.2	474.2	473.2	470.2	469.2
12.5°	470.2	467.2	464.2	462.2	461.2	458.2	455.2	454.2	451.2	449.2	448.2
15°	450.2	446.2	442.2	441.2	439.2	436.2	433.2	430.2	428.2	425.2	425.2
17.5°	427.2	422.2	419.2	416.2	415.2	411.2	407.2	405.2	402.2	400.2	399.2
20°	402.2	397.2	393.2	391.2	388.2	385.2	381.2	379.2	376.1	374.1	373.1
22.5°	375.1	369.1	365.1	363.1	361.1	356.1	353.1	351.1	348.1	346.1	345.1
25°	347.1	343.1	338.1	335.1	333.1	328.1	325.1	323.1	321.1	319.1	318.1
27.5°	319.1	313.1	308.1	306.1	304.1	301.1	296.1	293.1	292.1	291.1	290.1
30°	291.1	286.1	281.1	278.1	275.1	272.1	269.1	266.1	265.1	263.1	261.1
32.5°	265.1	260.1	255.1	253.1	251.1	246.1	243.1	241.1	240.1	236.1	235.1
35°	238.1	234.1	231.1	229.1	228.1	224.1	222.1	217.1	215.1	213.1	212.1
37.5°	210.1	206.1	203.1	203.1	201.1	199.1	197.1	195.1	191.1	190.1	189.1
40°	183.1	180.1	178.1	176.1	176.1	175.1	173.1	173.1	170.1	168.1	165.1
42.5°	158.1	156.1	154.1	154.1	153.1	152.1	150.1	150.1	148.1	146.1	143.1
45°	135.1	132.1	131.1	131.1	130.1	129.1	128.1	128.1	126.1	124.0	122.0
47.5°	114.0	112.0	111.0	110.0	109.0	109.0	108.0	107.0	106.0	104.0	102.0
50°	96.0	94.0	93.0	92.0	92.0	91.0	90.0	88.0	88.0	85.0	83.0
52.5°	80.0	79.0	77.0	76.0	75.0	74.0	73.0	72.0	70.0	68.0	67.0
55°	65.0	63.0	62.0	61.0	60.0	59.0	58.0	57.0	56.0	53.0	51.0
57.5°	52.0	50.0	49.0	49.0	48.0	46.0	45.0	44.0	42.0	40.0	37.0
60°	41.0	40.0	38.0	38.0	37.0	35.0	34.0	32.0	30.0	27.0	25.0
62.5°	32.0	31.0	29.0	28.0	28.0	26.0	24.0	22.0	20.0	18.0	15.0
65°	24.0	23.0	22.0	21.0	20.0	18.0	16.0	14.0	12.0	9.0	6.0
67.5°	18.0	17.0	15.0	15.0	14.0	12.0	10.0	8.0	5.0	3.0	1.0
70°	13.0	12.0	10.0	9.0	9.0	7.0	5.0	3.0	0.0	0.0	0.0
72.5°	9.0	8.0	6.0	5.0	5.0	3.0	1.0	0.0	0.0	0.0	0.0
75°	6.0	5.0	3.0	3.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	3.0	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	1.0	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°	1.0	0.0	0.0	0.0	1.0	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: P238328

CATALOG NUMBER: PRS610D010-S6M12-61SWWC

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	528.2	528.2	528.2	528.2	528.2	528.2	528.2	528.2
2.5°	518.2	517.2	517.2	517.2	516.2	517.2	517.2	517.2
5°	504.2	504.2	503.2	503.2	503.2	502.2	502.2	502.2
7.5°	487.2	487.2	486.2	486.2	486.2	485.2	484.2	484.2
10°	468.2	468.2	467.2	467.2	467.2	466.2	465.2	465.2
12.5°	446.2	446.2	446.2	445.2	445.2	445.2	444.2	445.2
15°	424.2	423.2	423.2	422.2	421.2	421.2	421.2	421.2
17.5°	398.2	397.2	397.2	396.2	397.2	396.2	396.2	396.2
20°	371.1	371.1	371.1	371.1	371.1	371.1	372.1	372.1
22.5°	345.1	344.1	345.1	344.1	344.1	345.1	345.1	346.1
25°	318.1	317.1	317.1	318.1	318.1	318.1	319.1	319.1
27.5°	288.1	290.1	290.1	291.1	291.1	292.1	293.1	292.1
30°	262.1	262.1	262.1	263.1	264.1	265.1	266.1	266.1
32.5°	234.1	235.1	236.1	235.1	236.1	238.1	240.1	241.1
35°	211.1	209.1	208.1	208.1	209.1	210.1	211.1	212.1
37.5°	186.1	185.1	184.1	182.1	183.1	184.1	184.1	184.1
40°	163.1	161.1	160.1	159.1	158.1	157.1	157.1	157.1
42.5°	141.1	139.1	137.1	137.1	134.1	133.1	133.1	132.1
45°	120.0	118.0	116.0	116.0	113.0	110.0	109.0	109.0
47.5°	100.0	97.0	96.0	95.0	92.0	89.0	87.0	86.0
50°	81.0	78.0	77.0	76.0	73.0	69.0	67.0	66.0
52.5°	64.0	61.0	59.0	58.0	54.0	51.0	49.0	48.0
55°	48.0	46.0	44.0	43.0	39.0	35.0	32.0	32.0
57.5°	35.0	31.0	30.0	29.0	25.0	22.0	19.0	18.0
60°	23.0	19.0	18.0	17.0	13.0	10.0	9.0	8.0
62.5°	12.0	9.0	8.0	7.0	5.0	3.0	2.0	2.0
65°	4.0	1.0	1.0	0.0	0.0	0.0	0.0	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)