

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: P238360

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

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238360  
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  
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 / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1599.8 lumens  
Efficiency: N/A  
Efficacy: 80.0 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

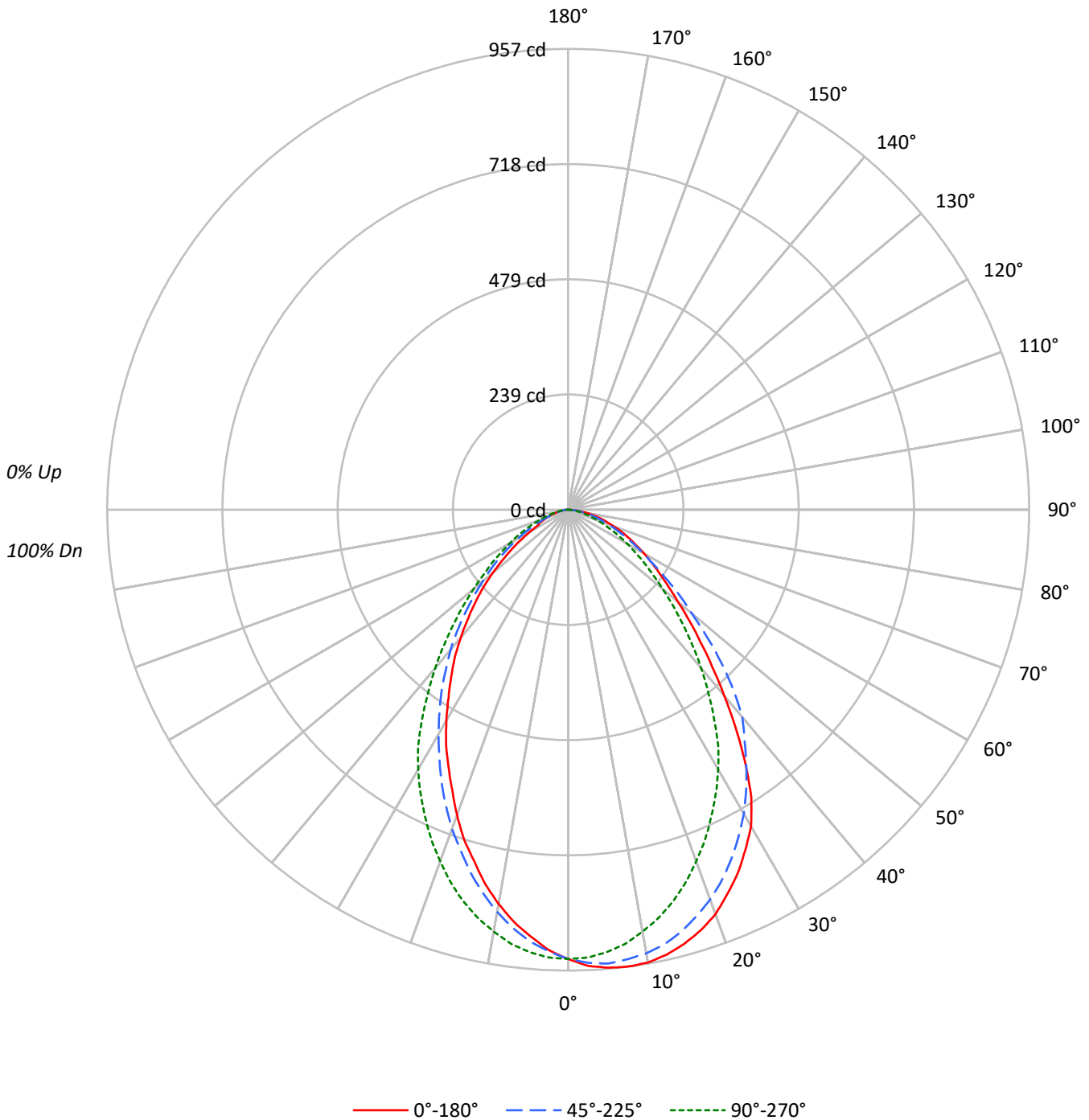
Input Watts (W): 20  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	40171	40171	40171
5°	41262	39858	38449
10°	41739	38893	36336
15°	41588	37527	33658
20°	40962	35592	30919
25°	39583	33397	27934
30°	37760	30963	25137
35°	33644	27716	22239
40°	28294	24146	19514
45°	23650	20477	16647
50°	19914	17148	13664
55°	17430	14495	10749
60°	15698	12142	7845
65°	14151	9943	6632
70°	12563	8195	5740
75°	11545	6504	5057
80°	9695	4835	4314
85°	7509	3211	3211



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.1	5.4
10°-20°	236.9	14.8
20°-30°	325.5	20.3
30°-40°	337.3	21.1
40°-50°	272.1	17.0
50°-60°	180.7	11.3
60°-70°	102.0	6.4
70°-80°	46.9	2.9
80°-90°	11.4	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°	649.5	40.6
0°-40°	986.8	61.7
0°-60°	1439.5	90.0
0°-90°	1599.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1599.8	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	933	933	933	933	933	
5°	955	946	922	900	890	91
15°	933	907	842	781	755	263
25°	833	801	703	623	588	382
35°	640	644	527	458	423	397
45°	388	449	336	302	273	302
55°	232	245	193	174	143	210
65°	139	128	98	78	65	138
75°	69	56	39	28	30	73
85°	15	11	6	9	6	18
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°	933.0	933.0	933.0	933.0	933.0	933.0	933.0	933.0	933.0	933.0	933.0
2.5°	948.2	946.1	946.1	946.1	946.1	946.1	946.1	946.1	943.9	943.9	941.7
5°	954.7	954.7	954.7	954.7	952.6	952.6	952.6	950.4	948.2	946.1	946.1
7.5°	956.9	956.9	956.9	954.7	954.7	954.7	952.6	950.4	948.2	946.1	941.7
10°	954.7	954.7	952.6	952.6	950.4	948.2	948.2	946.1	943.9	939.6	935.2
12.5°	946.1	946.1	946.1	943.9	941.7	941.7	939.6	935.2	933.0	928.7	924.4
15°	933.0	933.0	933.0	930.9	928.7	926.5	926.5	922.2	917.9	913.5	907.0
17.5°	915.7	915.7	915.7	913.5	909.2	909.2	907.0	902.7	898.3	894.0	885.3
20°	894.0	891.8	891.8	889.6	885.3	885.3	883.1	878.8	874.5	867.9	861.4
22.5°	863.6	865.8	863.6	861.4	859.3	857.1	854.9	850.6	846.2	839.7	833.2
25°	833.2	831.1	831.1	831.1	828.9	824.6	822.4	820.2	813.7	807.2	800.7
27.5°	796.3	792.0	792.0	794.2	792.0	789.8	787.7	783.3	779.0	772.5	766.0
30°	759.5	757.3	757.3	755.1	750.8	748.6	748.6	744.3	742.1	735.6	729.1
32.5°	707.4	709.5	711.7	713.9	711.7	711.7	711.7	705.2	698.7	694.4	687.8
35°	640.1	642.3	646.6	651.0	659.6	661.8	664.0	666.2	659.6	653.1	644.5
37.5°	570.7	575.0	577.2	583.7	590.2	596.7	598.9	607.6	614.1	611.9	601.1
40°	503.4	505.6	512.1	514.3	525.1	531.6	536.0	544.6	557.7	562.0	562.0
42.5°	442.7	444.8	447.0	453.5	462.2	470.9	473.0	481.7	496.9	503.4	507.7
45°	388.4	390.6	394.9	397.1	405.8	410.1	414.4	427.5	436.1	447.0	449.2
47.5°	340.7	340.7	342.8	349.3	355.9	360.2	362.4	373.2	381.9	388.4	390.6
50°	297.3	299.4	301.6	303.8	308.1	312.5	316.8	325.5	332.0	336.3	334.2
52.5°	262.6	264.7	264.7	266.9	271.2	275.6	277.7	282.1	286.4	288.6	290.8
55°	232.2	232.2	234.3	236.5	238.7	240.9	240.9	245.2	245.2	247.4	245.2
57.5°	206.1	206.1	206.1	208.3	208.3	210.5	210.5	210.5	210.5	210.5	208.3
60°	182.3	180.1	182.3	182.3	184.4	184.4	184.4	182.3	180.1	180.1	177.9
62.5°	158.4	158.4	158.4	160.6	160.6	158.4	158.4	158.4	154.1	154.1	151.9
65°	138.9	136.7	138.9	138.9	138.9	136.7	136.7	134.5	132.4	130.2	128.0
67.5°	119.3	119.3	119.3	119.3	117.2	117.2	117.2	112.8	110.7	108.5	106.3
70°	99.8	102.0	99.8	99.8	99.8	97.6	97.6	95.5	93.3	91.1	89.0
72.5°	84.6	84.6	84.6	82.5	82.5	80.3	80.3	78.1	75.9	73.8	71.6
75°	69.4	69.4	69.4	67.3	65.1	65.1	65.1	62.9	60.8	58.6	56.4
77.5°	54.2	54.2	52.1	52.1	49.9	49.9	49.9	47.7	45.6	43.4	43.4
80°	39.1	39.1	39.1	39.1	36.9	36.9	36.9	34.7	32.5	32.5	30.4
82.5°	26.0	28.2	26.0	26.0	23.9	23.9	23.9	23.9	21.7	21.7	21.7
85°	15.2	15.2	15.2	15.2	13.0	15.2	13.0	13.0	13.0	13.0	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



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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	933.0	933.0	933.0	933.0	933.0	933.0	933.0	933.0	933.0	933.0	933.0
2.5°	941.7	939.6	939.6	937.4	937.4	935.2	935.2	933.0	933.0	930.9	928.7
5°	941.7	939.6	937.4	937.4	935.2	933.0	930.9	928.7	924.4	922.2	920.0
7.5°	939.6	937.4	933.0	928.7	926.5	924.4	922.2	917.9	913.5	909.2	904.8
10°	933.0	928.7	922.2	917.9	915.7	911.3	907.0	902.7	896.2	889.6	885.3
12.5°	920.0	913.5	907.0	900.5	898.3	894.0	887.5	881.0	874.5	867.9	861.4
15°	900.5	894.0	887.5	881.0	876.6	874.5	865.8	857.1	850.6	841.9	833.2
17.5°	878.8	872.3	863.6	854.9	850.6	846.2	839.7	828.9	822.4	811.5	805.0
20°	854.9	846.2	835.4	826.7	822.4	818.0	807.2	798.5	787.7	776.8	770.3
22.5°	824.6	813.7	805.0	796.3	789.8	785.5	774.6	763.8	752.9	742.1	731.2
25°	789.8	781.2	770.3	761.6	755.1	748.6	737.8	726.9	713.9	703.0	692.2
27.5°	757.3	746.4	735.6	722.6	718.2	709.5	698.7	687.8	674.8	664.0	651.0
30°	718.2	707.4	694.4	683.5	679.2	672.7	659.6	646.6	635.8	622.8	611.9
32.5°	679.2	668.3	657.5	644.5	637.9	629.3	616.2	603.2	590.2	579.4	566.3
35°	637.9	627.1	614.1	601.1	592.4	583.7	568.5	553.3	540.3	527.3	520.8
37.5°	594.5	581.5	568.5	549.0	540.3	531.6	516.4	503.4	490.4	477.4	470.9
40°	546.8	531.6	516.4	499.1	490.4	479.5	466.5	453.5	440.5	429.6	421.0
42.5°	499.1	479.5	464.4	444.8	438.3	429.6	416.6	401.4	390.6	381.9	373.2
45°	444.8	431.8	414.4	397.1	388.4	381.9	368.9	355.9	345.0	336.3	329.8
47.5°	388.4	381.9	364.5	347.2	342.8	334.2	321.1	310.3	301.6	295.1	288.6
50°	336.3	332.0	321.1	303.8	297.3	290.8	279.9	271.2	262.6	256.0	251.7
52.5°	288.6	284.3	277.7	264.7	258.2	251.7	243.0	234.3	227.8	221.3	219.2
55°	245.2	240.9	234.3	225.7	221.3	214.8	208.3	201.8	195.3	193.1	188.8
57.5°	208.3	201.8	197.5	190.9	188.8	184.4	177.9	173.6	169.2	164.9	160.6
60°	175.8	171.4	167.1	162.7	160.6	158.4	151.9	147.6	143.2	141.0	136.7
62.5°	149.7	145.4	141.0	136.7	134.5	132.4	128.0	123.7	119.3	119.3	115.0
65°	125.9	121.5	119.3	115.0	112.8	110.7	106.3	104.2	99.8	97.6	95.5
67.5°	104.2	102.0	99.8	93.3	93.3	91.1	86.8	84.6	82.5	80.3	78.1
70°	84.6	82.5	80.3	78.1	75.9	73.8	71.6	69.4	65.1	65.1	62.9
72.5°	69.4	67.3	62.9	60.8	60.8	58.6	56.4	54.2	52.1	49.9	49.9
75°	54.2	52.1	49.9	47.7	45.6	45.6	43.4	41.2	41.2	39.1	36.9
77.5°	41.2	39.1	36.9	34.7	34.7	32.5	32.5	30.4	30.4	28.2	28.2
80°	28.2	28.2	26.0	26.0	23.9	23.9	21.7	21.7	21.7	19.5	19.5
82.5°	19.5	17.4	17.4	17.4	15.2	15.2	15.2	15.2	13.0	13.0	13.0
85°	10.8	10.8	8.7	8.7	8.7	8.7	8.7	8.7	8.7	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



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**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	933.0	933.0	933.0	933.0	933.0	933.0	933.0	933.0	933.0	933.0	933.0
2.5°	928.7	926.5	924.4	924.4	924.4	922.2	922.2	920.0	917.9	917.9	915.7
5°	915.7	913.5	911.3	909.2	909.2	904.8	904.8	902.7	900.5	898.3	896.2
7.5°	900.5	896.2	894.0	889.6	889.6	887.5	881.0	878.8	876.6	872.3	870.1
10°	881.0	874.5	870.1	867.9	863.6	861.4	854.9	852.8	848.4	846.2	841.9
12.5°	854.9	848.4	841.9	839.7	837.6	831.1	826.7	820.2	815.9	811.5	807.2
15°	826.7	820.2	811.5	809.4	807.2	798.5	792.0	787.7	781.2	776.8	772.5
17.5°	794.2	785.5	776.8	774.6	770.3	761.6	757.3	750.8	742.1	737.8	733.4
20°	759.5	750.8	742.1	739.9	735.6	726.9	718.2	711.7	705.2	700.9	694.4
22.5°	720.4	711.7	700.9	696.5	694.4	683.5	677.0	670.5	664.0	655.3	651.0
25°	683.5	672.7	664.0	657.5	653.1	644.5	637.9	627.1	622.8	614.1	609.7
27.5°	642.3	631.4	622.8	616.2	611.9	605.4	594.5	585.9	579.4	572.8	568.5
30°	601.1	590.2	581.5	575.0	570.7	562.0	551.1	546.8	538.1	531.6	525.1
32.5°	557.7	546.8	536.0	533.8	527.3	518.6	512.1	503.4	496.9	490.4	483.9
35°	507.7	501.2	492.6	490.4	486.1	477.4	470.9	464.4	457.8	449.2	442.7
37.5°	460.0	451.3	447.0	442.7	440.5	436.1	429.6	423.1	416.6	410.1	407.9
40°	412.3	405.8	399.3	399.3	397.1	392.7	388.4	384.1	379.7	373.2	368.9
42.5°	366.7	360.2	358.0	353.7	351.5	349.3	345.0	342.8	340.7	336.3	332.0
45°	323.3	319.0	314.6	312.5	310.3	308.1	308.1	303.8	301.6	299.4	295.1
47.5°	282.1	279.9	277.7	275.6	273.4	273.4	269.1	266.9	264.7	264.7	260.4
50°	247.4	245.2	243.0	240.9	238.7	238.7	236.5	234.3	232.2	230.0	225.7
52.5°	217.0	214.8	210.5	210.5	210.5	208.3	206.1	204.0	201.8	199.6	197.5
55°	186.6	184.4	182.3	182.3	180.1	180.1	177.9	175.8	173.6	171.4	169.2
57.5°	160.6	158.4	156.2	156.2	154.1	154.1	151.9	149.7	145.4	143.2	141.0
60°	136.7	134.5	132.4	132.4	130.2	128.0	128.0	123.7	121.5	119.3	115.0
62.5°	112.8	110.7	110.7	108.5	108.5	108.5	106.3	102.0	99.8	95.5	93.3
65°	93.3	91.1	91.1	89.0	89.0	86.8	84.6	82.5	78.1	75.9	71.6
67.5°	75.9	75.9	73.8	71.6	71.6	69.4	67.3	62.9	60.8	56.4	54.2
70°	60.8	58.6	58.6	56.4	54.2	52.1	49.9	47.7	45.6	45.6	45.6
72.5°	47.7	45.6	45.6	43.4	43.4	39.1	36.9	36.9	36.9	36.9	36.9
75°	36.9	34.7	32.5	32.5	30.4	30.4	28.2	28.2	28.2	28.2	30.4
77.5°	26.0	26.0	23.9	23.9	21.7	21.7	21.7	21.7	21.7	21.7	23.9
80°	19.5	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4
82.5°	13.0	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	13.0
85°	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	8.7	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





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CATALOG NUMBER: PRS620D010-S6M12-61SWWMW

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	933.0	933.0	933.0	933.0	933.0	933.0	933.0	933.0
2.5°	915.7	915.7	915.7	915.7	915.7	913.5	915.7	915.7
5°	896.2	894.0	894.0	891.8	891.8	891.8	891.8	889.6
7.5°	867.9	865.8	865.8	865.8	863.6	863.6	861.4	863.6
10°	837.6	835.4	833.2	835.4	831.1	831.1	831.1	831.1
12.5°	805.0	802.9	800.7	798.5	798.5	796.3	796.3	796.3
15°	768.1	766.0	763.8	761.6	761.6	757.3	757.3	755.1
17.5°	729.1	726.9	724.7	722.6	718.2	718.2	716.1	718.2
20°	687.8	683.5	681.3	681.3	679.2	677.0	674.8	674.8
22.5°	646.6	642.3	642.3	637.9	635.8	633.6	631.4	629.3
25°	603.2	598.9	598.9	594.5	592.4	590.2	590.2	588.0
27.5°	562.0	555.5	555.5	553.3	549.0	546.8	546.8	549.0
30°	520.8	516.4	514.3	509.9	507.7	505.6	503.4	505.6
32.5°	479.5	473.0	470.9	470.9	468.7	466.5	464.4	462.2
35°	438.3	436.1	431.8	429.6	425.3	425.3	423.1	423.1
37.5°	401.4	394.9	392.7	390.6	388.4	386.2	384.1	386.2
40°	362.4	358.0	353.7	353.7	349.3	347.2	345.0	347.2
42.5°	327.7	323.3	321.1	316.8	312.5	310.3	310.3	308.1
45°	292.9	286.4	286.4	279.9	277.7	275.6	273.4	273.4
47.5°	258.2	253.9	249.5	249.5	243.0	240.9	238.7	238.7
50°	225.7	219.2	217.0	214.8	210.5	206.1	204.0	204.0
52.5°	193.1	188.8	184.4	184.4	180.1	175.8	173.6	171.4
55°	164.9	160.6	158.4	154.1	151.9	145.4	143.2	143.2
57.5°	136.7	132.4	130.2	128.0	123.7	119.3	115.0	115.0
60°	112.8	108.5	108.5	104.2	99.8	95.5	91.1	91.1
62.5°	89.0	84.6	84.6	82.5	78.1	75.9	73.8	71.6
65°	69.4	65.1	65.1	65.1	65.1	65.1	62.9	65.1
67.5°	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2
70°	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6
72.5°	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9
75°	30.4	30.4	30.4	30.4	30.4	30.4	30.4	30.4
77.5°	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9
80°	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4
82.5°	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
85°	6.5	8.7	8.7	8.7	8.7	8.7	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)