

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: P238355

Luminaire Tested: **PRS620D010-S6M12-61SWWMW-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P238355
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-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: 1531.5 lumens
Efficiency: N/A
Efficacy: 76.6 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

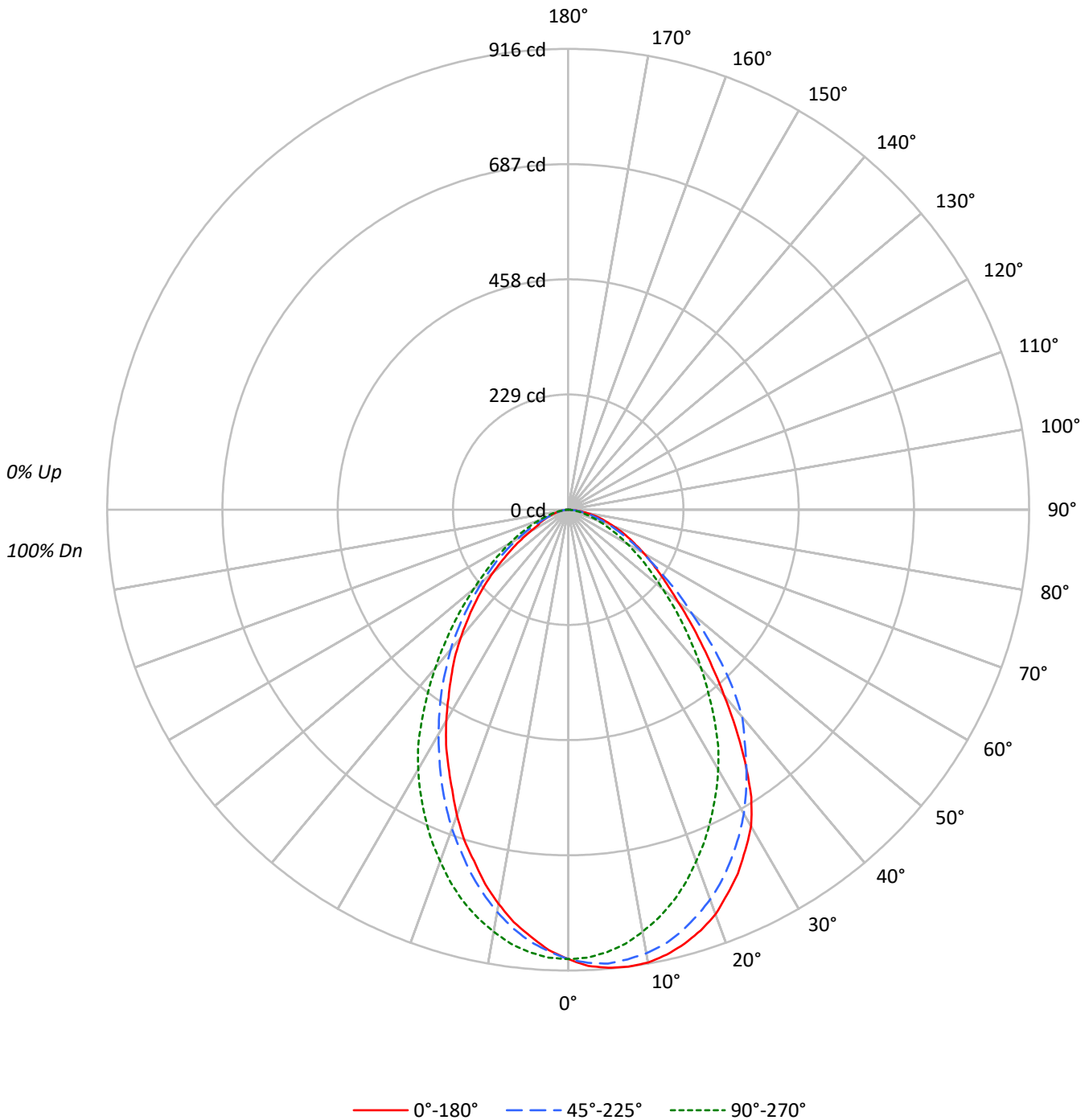
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	38457	38457	38457
5°	39503	38155	36811
10°	39960	37236	34784
15°	39814	35927	32223
20°	39212	34075	29599
25°	37896	31972	26742
30°	36144	29641	24063
35°	32210	26533	21293
40°	27085	23117	18683
45°	22639	19607	15935
50°	19063	16417	13082
55°	16687	13880	10291
60°	15026	11625	7509
65°	13540	9526	6347
70°	12035	7843	5489
75°	11063	6222	4841
80°	9273	4637	4116
85°	7163	3063	3063



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.4	5.4
10°-20°	226.8	14.8
20°-30°	311.6	20.3
30°-40°	322.9	21.1
40°-50°	260.5	17.0
50°-60°	173.0	11.3
60°-70°	97.7	6.4
70°-80°	44.9	2.9
80°-90°	10.9	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°	621.8	40.6
0°-40°	944.6	61.7
0°-60°	1378.1	90.0
0°-90°	1531.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1531.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	893	893	893	893	893	
5°	914	906	883	862	852	87
15°	893	868	806	748	723	251
25°	798	766	673	596	563	366
35°	613	617	505	438	405	380
45°	372	430	322	289	262	289
55°	222	235	185	166	137	201
65°	133	123	94	75	62	132
75°	66	54	37	27	29	70
85°	14	10	6	8	6	17
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°	893.2	893.2	893.2	893.2	893.2	893.2	893.2	893.2	893.2	893.2	893.2
2.5°	907.8	905.7	905.7	905.7	905.7	905.7	905.7	905.7	903.6	903.6	901.5
5°	914.0	914.0	914.0	914.0	911.9	911.9	911.9	909.8	907.8	905.7	905.7
7.5°	916.1	916.1	916.1	914.0	914.0	914.0	911.9	909.8	907.8	905.7	901.5
10°	914.0	914.0	911.9	911.9	909.8	907.8	907.8	905.7	903.6	899.5	895.3
12.5°	905.7	905.7	905.7	903.6	901.5	901.5	899.5	895.3	893.2	889.1	884.9
15°	893.2	893.2	893.2	891.2	889.1	887.0	887.0	882.8	878.7	874.5	868.3
17.5°	876.6	876.6	876.6	874.5	870.4	870.4	868.3	864.1	860.0	855.8	847.5
20°	855.8	853.8	853.8	851.7	847.5	847.5	845.5	841.3	837.1	830.9	824.7
22.5°	826.8	828.8	826.8	824.7	822.6	820.5	818.4	814.3	810.1	803.9	797.7
25°	797.7	795.6	795.6	795.6	793.5	789.4	787.3	785.2	779.0	772.7	766.5
27.5°	762.4	758.2	758.2	760.3	758.2	756.1	754.1	749.9	745.7	739.5	733.3
30°	727.0	725.0	725.0	722.9	718.7	716.7	716.7	712.5	710.4	704.2	698.0
32.5°	677.2	679.3	681.3	683.4	681.3	681.3	681.3	675.1	668.9	664.7	658.5
35°	612.8	614.9	619.0	623.2	631.5	633.6	635.6	637.7	631.5	625.3	617.0
37.5°	546.3	550.5	552.6	558.8	565.0	571.3	573.3	581.6	587.9	585.8	575.4
40°	481.9	484.0	490.2	492.3	502.7	508.9	513.1	521.4	533.9	538.0	538.0
42.5°	423.8	425.8	427.9	434.2	442.5	450.8	452.8	461.2	475.7	481.9	486.1
45°	371.8	373.9	378.1	380.1	388.5	392.6	396.8	409.2	417.5	427.9	430.0
47.5°	326.1	326.1	328.2	334.4	340.7	344.8	346.9	357.3	365.6	371.8	373.9
50°	284.6	286.7	288.7	290.8	295.0	299.1	303.3	311.6	317.8	322.0	319.9
52.5°	251.4	253.4	253.4	255.5	259.7	263.8	265.9	270.0	274.2	276.3	278.4
55°	222.3	222.3	224.3	226.4	228.5	230.6	230.6	234.7	234.7	236.8	234.7
57.5°	197.3	197.3	197.3	199.4	199.4	201.5	201.5	201.5	201.5	201.5	199.4
60°	174.5	172.4	174.5	174.5	176.6	176.6	176.6	174.5	172.4	172.4	170.3
62.5°	151.6	151.6	151.6	153.7	153.7	151.6	151.6	151.6	147.5	147.5	145.4
65°	132.9	130.9	132.9	132.9	132.9	130.9	130.9	128.8	126.7	124.6	122.6
67.5°	114.3	114.3	114.3	114.3	112.2	112.2	112.2	108.0	105.9	103.9	101.8
70°	95.6	97.6	95.6	95.6	95.6	93.5	93.5	91.4	89.3	87.2	85.2
72.5°	81.0	81.0	81.0	78.9	78.9	76.9	76.9	74.8	72.7	70.6	68.6
75°	66.5	66.5	66.5	64.4	62.3	62.3	62.3	60.2	58.2	56.1	54.0
77.5°	51.9	51.9	49.9	49.9	47.8	47.8	47.8	45.7	43.6	41.5	41.5
80°	37.4	37.4	37.4	37.4	35.3	35.3	35.3	33.2	31.2	31.2	29.1
82.5°	24.9	27.0	24.9	24.9	22.9	22.9	22.9	22.9	20.8	20.8	20.8
85°	14.5	14.5	14.5	14.5	12.5	14.5	12.5	12.5	12.5	12.5	10.4
87.5°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
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°	893.2	893.2	893.2	893.2	893.2	893.2	893.2	893.2	893.2	893.2	893.2
2.5°	901.5	899.5	899.5	897.4	897.4	895.3	895.3	893.2	893.2	891.2	889.1
5°	901.5	899.5	897.4	897.4	895.3	893.2	891.2	889.1	884.9	882.8	880.8
7.5°	899.5	897.4	893.2	889.1	887.0	884.9	882.8	878.7	874.5	870.4	866.2
10°	893.2	889.1	882.8	878.7	876.6	872.5	868.3	864.1	857.9	851.7	847.5
12.5°	880.8	874.5	868.3	862.1	860.0	855.8	849.6	843.4	837.1	830.9	824.7
15°	862.1	855.8	849.6	843.4	839.2	837.1	828.8	820.5	814.3	806.0	797.7
17.5°	841.3	835.1	826.8	818.4	814.3	810.1	803.9	793.5	787.3	776.9	770.7
20°	818.4	810.1	799.8	791.4	787.3	783.1	772.7	764.4	754.1	743.7	737.4
22.5°	789.4	779.0	770.7	762.4	756.1	752.0	741.6	731.2	720.8	710.4	700.0
25°	756.1	747.8	737.4	729.1	722.9	716.7	706.3	695.9	683.4	673.0	662.7
27.5°	725.0	714.6	704.2	691.7	687.6	679.3	668.9	658.5	646.0	635.6	623.2
30°	687.6	677.2	664.7	654.3	650.2	644.0	631.5	619.0	608.6	596.2	585.8
32.5°	650.2	639.8	629.4	617.0	610.7	602.4	589.9	577.5	565.0	554.6	542.2
35°	610.7	600.3	587.9	575.4	567.1	558.8	544.2	529.7	517.2	504.8	498.5
37.5°	569.2	556.7	544.2	525.6	517.2	508.9	494.4	481.9	469.5	457.0	450.8
40°	523.5	508.9	494.4	477.8	469.5	459.1	446.6	434.2	421.7	411.3	403.0
42.5°	477.8	459.1	444.5	425.8	419.6	411.3	398.8	384.3	373.9	365.6	357.3
45°	425.8	413.4	396.8	380.1	371.8	365.6	353.1	340.7	330.3	322.0	315.7
47.5°	371.8	365.6	349.0	332.4	328.2	319.9	307.4	297.1	288.7	282.5	276.3
50°	322.0	317.8	307.4	290.8	284.6	278.4	268.0	259.7	251.4	245.1	241.0
52.5°	276.3	272.1	265.9	253.4	247.2	241.0	232.7	224.3	218.1	211.9	209.8
55°	234.7	230.6	224.3	216.0	211.9	205.7	199.4	193.2	187.0	184.9	180.7
57.5°	199.4	193.2	189.0	182.8	180.7	176.6	170.3	166.2	162.0	157.9	153.7
60°	168.3	164.1	160.0	155.8	153.7	151.6	145.4	141.3	137.1	135.0	130.9
62.5°	143.3	139.2	135.0	130.9	128.8	126.7	122.6	118.4	114.3	114.3	110.1
65°	120.5	116.3	114.3	110.1	108.0	105.9	101.8	99.7	95.6	93.5	91.4
67.5°	99.7	97.6	95.6	89.3	89.3	87.2	83.1	81.0	78.9	76.9	74.8
70°	81.0	78.9	76.9	74.8	72.7	70.6	68.6	66.5	62.3	62.3	60.2
72.5°	66.5	64.4	60.2	58.2	58.2	56.1	54.0	51.9	49.9	47.8	47.8
75°	51.9	49.9	47.8	45.7	43.6	43.6	41.5	39.5	39.5	37.4	35.3
77.5°	39.5	37.4	35.3	33.2	33.2	31.2	31.2	29.1	29.1	27.0	27.0
80°	27.0	27.0	24.9	24.9	22.9	22.9	20.8	20.8	20.8	18.7	18.7
82.5°	18.7	16.6	16.6	16.6	14.5	14.5	14.5	14.5	12.5	12.5	12.5
85°	10.4	10.4	8.3	8.3	8.3	8.3	8.3	8.3	8.3	6.2	6.2
87.5°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
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°	893.2	893.2	893.2	893.2	893.2	893.2	893.2	893.2	893.2	893.2	893.2
2.5°	889.1	887.0	884.9	884.9	884.9	882.8	882.8	880.8	878.7	878.7	876.6
5°	876.6	874.5	872.5	870.4	870.4	866.2	866.2	864.1	862.1	860.0	857.9
7.5°	862.1	857.9	855.8	851.7	851.7	849.6	843.4	841.3	839.2	835.1	833.0
10°	843.4	837.1	833.0	830.9	826.8	824.7	818.4	816.4	812.2	810.1	806.0
12.5°	818.4	812.2	806.0	803.9	801.8	795.6	791.4	785.2	781.1	776.9	772.7
15°	791.4	785.2	776.9	774.8	772.7	764.4	758.2	754.1	747.8	743.7	739.5
17.5°	760.3	752.0	743.7	741.6	737.4	729.1	725.0	718.7	710.4	706.3	702.1
20°	727.0	718.7	710.4	708.4	704.2	695.9	687.6	681.3	675.1	671.0	664.7
22.5°	689.7	681.3	671.0	666.8	664.7	654.3	648.1	641.9	635.6	627.3	623.2
25°	654.3	644.0	635.6	629.4	625.3	617.0	610.7	600.3	596.2	587.9	583.7
27.5°	614.9	604.5	596.2	589.9	585.8	579.6	569.2	560.9	554.6	548.4	544.2
30°	575.4	565.0	556.7	550.5	546.3	538.0	527.6	523.5	515.2	508.9	502.7
32.5°	533.9	523.5	513.1	511.0	504.8	496.5	490.2	481.9	475.7	469.5	463.2
35°	486.1	479.9	471.5	469.5	465.3	457.0	450.8	444.5	438.3	430.0	423.8
37.5°	440.4	432.1	427.9	423.8	421.7	417.5	411.3	405.1	398.8	392.6	390.5
40°	394.7	388.5	382.2	382.2	380.1	376.0	371.8	367.7	363.5	357.3	353.1
42.5°	351.1	344.8	342.8	338.6	336.5	334.4	330.3	328.2	326.1	322.0	317.8
45°	309.5	305.4	301.2	299.1	297.1	295.0	295.0	290.8	288.7	286.7	282.5
47.5°	270.0	268.0	265.9	263.8	261.7	261.7	257.6	255.5	253.4	253.4	249.3
50°	236.8	234.7	232.7	230.6	228.5	228.5	226.4	224.3	222.3	220.2	216.0
52.5°	207.7	205.7	201.5	201.5	201.5	199.4	197.3	195.3	193.2	191.1	189.0
55°	178.6	176.6	174.5	174.5	172.4	172.4	170.3	168.3	166.2	164.1	162.0
57.5°	153.7	151.6	149.6	149.6	147.5	147.5	145.4	143.3	139.2	137.1	135.0
60°	130.9	128.8	126.7	126.7	124.6	122.6	122.6	118.4	116.3	114.3	110.1
62.5°	108.0	105.9	105.9	103.9	103.9	103.9	101.8	97.6	95.6	91.4	89.3
65°	89.3	87.2	87.2	85.2	85.2	83.1	81.0	78.9	74.8	72.7	68.6
67.5°	72.7	72.7	70.6	68.6	68.6	66.5	64.4	60.2	58.2	54.0	51.9
70°	58.2	56.1	56.1	54.0	51.9	49.9	47.8	45.7	43.6	43.6	43.6
72.5°	45.7	43.6	43.6	41.5	41.5	37.4	35.3	35.3	35.3	35.3	35.3
75°	35.3	33.2	31.2	31.2	29.1	29.1	27.0	27.0	27.0	27.0	29.1
77.5°	24.9	24.9	22.9	22.9	20.8	20.8	20.8	20.8	20.8	20.8	22.9
80°	18.7	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6
82.5°	12.5	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	12.5
85°	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	8.3	6.2	6.2
87.5°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
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-3000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	893.2	893.2	893.2	893.2	893.2	893.2	893.2	893.2
2.5°	876.6	876.6	876.6	876.6	876.6	874.5	876.6	876.6
5°	857.9	855.8	855.8	853.8	853.8	853.8	853.8	851.7
7.5°	830.9	828.8	828.8	828.8	826.8	826.8	824.7	826.8
10°	801.8	799.8	797.7	799.8	795.6	795.6	795.6	795.6
12.5°	770.7	768.6	766.5	764.4	764.4	762.4	762.4	762.4
15°	735.4	733.3	731.2	729.1	729.1	725.0	725.0	722.9
17.5°	698.0	695.9	693.8	691.7	687.6	687.6	685.5	687.6
20°	658.5	654.3	652.3	652.3	650.2	648.1	646.0	646.0
22.5°	619.0	614.9	614.9	610.7	608.6	606.6	604.5	602.4
25°	577.5	573.3	573.3	569.2	567.1	565.0	565.0	562.9
27.5°	538.0	531.8	531.8	529.7	525.6	523.5	523.5	525.6
30°	498.5	494.4	492.3	488.2	486.1	484.0	481.9	484.0
32.5°	459.1	452.8	450.8	450.8	448.7	446.6	444.5	442.5
35°	419.6	417.5	413.4	411.3	407.1	407.1	405.1	405.1
37.5°	384.3	378.1	376.0	373.9	371.8	369.8	367.7	369.8
40°	346.9	342.8	338.6	338.6	334.4	332.4	330.3	332.4
42.5°	313.7	309.5	307.4	303.3	299.1	297.1	297.1	295.0
45°	280.4	274.2	274.2	268.0	265.9	263.8	261.7	261.7
47.5°	247.2	243.0	238.9	238.9	232.7	230.6	228.5	228.5
50°	216.0	209.8	207.7	205.7	201.5	197.3	195.3	195.3
52.5°	184.9	180.7	176.6	176.6	172.4	168.3	166.2	164.1
55°	157.9	153.7	151.6	147.5	145.4	139.2	137.1	137.1
57.5°	130.9	126.7	124.6	122.6	118.4	114.3	110.1	110.1
60°	108.0	103.9	103.9	99.7	95.6	91.4	87.2	87.2
62.5°	85.2	81.0	81.0	78.9	74.8	72.7	70.6	68.6
65°	66.5	62.3	62.3	62.3	62.3	62.3	60.2	62.3
67.5°	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9
70°	43.6	43.6	43.6	43.6	43.6	43.6	43.6	43.6
72.5°	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3
75°	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1
77.5°	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9
80°	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6
82.5°	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
85°	6.2	8.3	8.3	8.3	8.3	8.3	6.2	6.2
87.5°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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