

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: P238349

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

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238349  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-26)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS615D010-S6M12-61SWWH-4000K  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" WALL WASH DISTRIBUTION, WW TRIM HAZE  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 955.8 lumens  
Efficiency: N/A  
Efficacy: 75.9 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 0.98 / 1.08  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
CIE Type: Direct

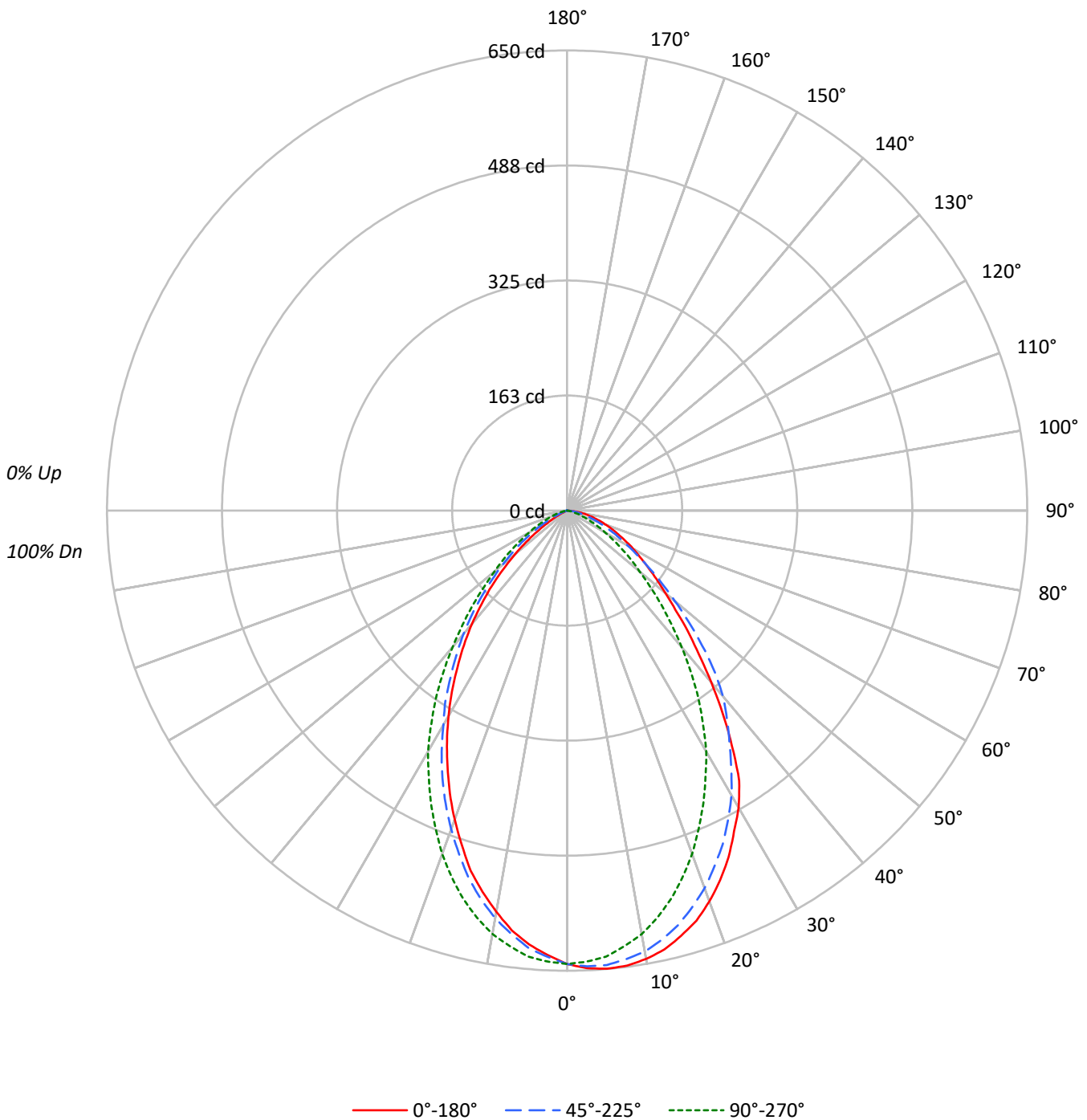
Input Watts (W): 12.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

### 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	100	102	99	97	98	96	94	94	93	92	90					90			
2	104	98	92	88	102	96	91	87	93	89	85	89	86	83	87	84	81	80					80			
3	97	89	82	77	95	87	81	76	84	79	75	82	77	74	79	76	73	71					71			
4	90	81	73	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63					63			
5	84	74	66	61	82	73	66	60	71	64	60	69	63	59	67	62	59	57					57			
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51					51			
7	74	62	55	50	72	61	54	49	60	54	49	59	53	49	57	52	48	47					47			
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43					43			
9	65	54	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39					39			
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36					36			

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

	0°	90°	180°
0°	27573	27573	27573
5°	28076	27332	26589
10°	28112	26551	25165
15°	27721	25300	23473
20°	26919	23643	21278
25°	25644	21625	18984
30°	24078	19539	16640
35°	21350	16967	14186
40°	17772	14130	11753
45°	14662	11441	9182
50°	12144	8949	6471
55°	10427	7049	3873
60°	9231	5356	1705
65°	8089	3912	540
70°	7327	2669	327
75°	6388	1763	216
80°	5579	992	0
85°	3903	642	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.6	6.2
10°-20°	159.9	16.7
20°-30°	213.2	22.3
30°-40°	210.4	22.0
40°-50°	157.8	16.5
50°-60°	92.6	9.7
60°-70°	43.1	4.5
70°-80°	16.2	1.7
80°-90°	3.0	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°	432.7	45.3
0°-40°	643.1	67.3
0°-60°	893.5	93.5
0°-90°	955.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	955.8	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	640	640	640	640	640	
5°	650	644	632	620	615	62
15°	622	606	568	537	527	175
25°	540	520	455	417	400	248
35°	406	400	323	287	270	252
45°	241	270	188	169	151	187
55°	139	142	94	78	52	126
65°	79	69	38	18	5	80
75°	38	28	11	1	1	41
85°	8	4	1	0	0	10
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°	640.4	640.4	640.4	640.4	640.4	640.4	640.4	640.4	640.4	640.4	640.4
2.5°	647.0	647.0	647.0	647.0	645.7	645.7	645.7	645.7	645.7	644.4	644.4
5°	649.6	649.6	648.3	648.3	648.3	648.3	647.0	647.0	645.7	645.7	644.4
7.5°	648.3	647.0	647.0	647.0	645.7	645.7	645.7	644.4	643.0	641.7	639.1
10°	643.0	643.0	643.0	641.7	640.4	640.4	640.4	637.7	636.4	633.8	632.4
12.5°	635.1	633.8	633.8	632.4	631.1	631.1	629.8	627.2	625.8	623.2	620.5
15°	621.9	621.9	621.9	620.5	619.2	617.9	616.6	615.2	612.6	610.0	606.0
17.5°	607.3	606.0	606.0	604.7	602.0	602.0	600.7	598.0	595.4	592.8	587.5
20°	587.5	587.5	587.5	586.1	584.8	582.2	582.2	578.2	575.6	571.6	567.6
22.5°	565.0	565.0	565.0	563.6	562.3	561.0	559.7	557.0	553.1	549.1	543.8
25°	539.8	538.5	538.5	538.5	537.2	535.9	534.5	531.9	529.2	525.3	520.0
27.5°	510.7	509.4	509.4	509.4	508.1	506.8	505.4	505.4	502.8	497.5	492.2
30°	484.3	484.3	484.3	481.6	479.0	477.6	477.6	475.0	471.0	468.4	464.4
32.5°	452.5	452.5	453.8	452.5	452.5	452.5	449.9	447.2	441.9	437.9	431.3
35°	406.2	408.8	410.2	412.8	415.5	418.1	419.4	419.4	414.1	407.5	399.6
37.5°	361.2	362.5	363.9	369.1	371.8	374.4	375.8	381.1	385.0	378.4	370.5
40°	316.2	317.5	321.5	322.8	329.5	330.8	334.7	340.0	345.3	346.7	342.7
42.5°	275.2	276.5	279.2	281.8	288.4	292.4	293.7	297.7	304.3	309.6	308.3
45°	240.8	240.8	242.1	246.1	250.1	252.7	256.7	262.0	267.3	269.9	269.9
47.5°	207.7	207.7	209.1	213.0	218.3	218.3	221.0	226.3	232.9	232.9	232.9
50°	181.3	182.6	182.6	185.2	187.9	189.2	191.9	197.1	199.8	199.8	198.5
52.5°	158.8	158.8	160.1	161.4	162.7	165.4	165.4	168.0	170.7	170.7	168.0
55°	138.9	138.9	138.9	140.2	141.6	142.9	144.2	145.5	144.2	142.9	141.6
57.5°	121.7	121.7	121.7	121.7	123.0	124.4	124.4	124.4	123.0	121.7	117.8
60°	107.2	107.2	107.2	107.2	107.2	107.2	107.2	105.8	103.2	101.9	99.2
62.5°	92.6	92.6	92.6	92.6	92.6	92.6	91.3	90.0	88.6	84.7	82.0
65°	79.4	80.7	80.7	79.4	79.4	78.1	78.1	75.4	74.1	71.4	68.8
67.5°	68.8	68.8	68.8	68.8	67.5	66.2	66.2	63.5	62.2	59.5	55.6
70°	58.2	58.2	56.9	56.9	56.9	55.6	54.2	52.9	50.3	47.6	45.0
72.5°	47.6	47.6	47.6	47.6	45.0	45.0	43.7	42.3	39.7	38.4	35.7
75°	38.4	38.4	38.4	37.0	37.0	35.7	34.4	33.1	31.8	29.1	27.8
77.5°	30.4	30.4	30.4	29.1	27.8	27.8	26.5	25.1	23.8	22.5	19.8
80°	22.5	22.5	21.2	21.2	19.8	19.8	19.8	18.5	17.2	15.9	14.6
82.5°	14.6	14.6	14.6	14.6	13.2	13.2	11.9	11.9	10.6	9.3	9.3
85°	7.9	7.9	7.9	7.9	6.6	6.6	6.6	6.6	5.3	5.3	4.0
87.5°	1.3	1.3	1.3	1.3	1.3	1.3	2.6	1.3	1.3	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°	640.4	640.4	640.4	640.4	640.4	640.4	640.4	640.4	640.4	640.4	640.4
2.5°	643.0	643.0	641.7	641.7	641.7	640.4	640.4	639.1	639.1	637.7	637.7
5°	643.0	641.7	640.4	639.1	637.7	637.7	636.4	633.8	632.4	632.4	629.8
7.5°	637.7	636.4	633.8	632.4	631.1	629.8	627.2	625.8	623.2	620.5	619.2
10°	629.8	627.2	623.2	620.5	620.5	617.9	615.2	612.6	608.6	607.3	603.3
12.5°	616.6	612.6	610.0	607.3	604.7	603.3	599.4	596.7	591.4	588.8	584.8
15°	602.0	598.0	594.1	588.8	587.5	584.8	580.8	575.6	572.9	567.6	563.6
17.5°	584.8	578.2	574.2	568.9	566.3	563.6	557.0	553.1	549.1	542.5	538.5
20°	562.3	557.0	551.7	545.1	542.5	538.5	533.2	526.6	521.3	516.0	510.7
22.5°	538.5	533.2	526.6	520.0	516.0	512.0	505.4	498.8	492.2	485.6	481.6
25°	512.0	505.4	498.8	492.2	486.9	484.3	476.3	469.7	461.8	455.2	449.9
27.5°	485.6	479.0	471.0	461.8	456.5	453.8	445.9	436.6	428.7	423.4	416.8
30°	456.5	448.5	439.3	431.3	426.0	422.1	415.5	406.2	399.6	393.0	383.7
32.5°	424.7	416.8	410.2	399.6	395.6	391.6	382.4	373.1	363.9	357.2	351.9
35°	393.0	387.7	379.7	369.1	362.5	357.2	345.3	337.4	329.5	322.8	317.5
37.5°	363.9	355.9	342.7	330.8	325.5	321.5	308.3	300.3	291.1	287.1	279.2
40°	332.1	320.2	308.3	296.4	291.1	285.8	276.5	264.6	258.0	251.4	246.1
42.5°	300.3	284.5	272.6	262.0	255.4	250.1	239.5	230.2	222.3	218.3	213.0
45°	264.6	252.7	239.5	227.6	223.6	217.0	207.7	199.8	193.2	187.9	183.9
47.5°	227.6	221.0	207.7	197.1	191.9	186.6	178.6	170.7	164.1	158.8	156.1
50°	194.5	189.2	179.9	168.0	164.1	158.8	150.8	145.5	138.9	133.6	131.0
52.5°	164.1	158.8	152.2	142.9	137.6	135.0	127.0	121.7	117.8	113.8	109.8
55°	137.6	132.3	127.0	119.1	115.1	111.1	105.8	100.6	96.6	93.9	91.3
57.5°	115.1	109.8	104.5	99.2	95.3	92.6	87.3	84.7	80.7	76.7	75.4
60°	95.3	91.3	87.3	82.0	79.4	75.4	71.4	67.5	64.8	62.2	59.5
62.5°	79.4	75.4	71.4	66.2	64.8	62.2	58.2	54.2	51.6	50.3	47.6
65°	64.8	60.9	58.2	54.2	51.6	50.3	46.3	43.7	41.0	38.4	35.7
67.5°	52.9	50.3	47.6	43.7	41.0	39.7	35.7	33.1	31.8	29.1	27.8
70°	42.3	39.7	37.0	34.4	31.8	30.4	27.8	25.1	23.8	21.2	19.8
72.5°	33.1	30.4	29.1	25.1	23.8	22.5	19.8	18.5	17.2	15.9	14.6
75°	25.1	23.8	21.2	18.5	17.2	17.2	14.6	13.2	11.9	10.6	9.3
77.5°	18.5	17.2	14.6	13.2	11.9	11.9	10.6	9.3	7.9	6.6	6.6
80°	13.2	10.6	9.3	7.9	7.9	6.6	6.6	5.3	4.0	4.0	2.6
82.5°	7.9	6.6	5.3	5.3	4.0	4.0	4.0	2.6	2.6	1.3	1.3
85°	4.0	2.6	2.6	2.6	1.3	1.3	1.3	1.3	1.3	1.3	1.3
87.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	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):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	640.4	640.4	640.4	640.4	640.4	640.4	640.4	640.4	640.4	640.4	640.4
2.5°	636.4	635.1	635.1	635.1	633.8	633.8	632.4	632.4	631.1	631.1	631.1
5°	628.5	627.2	625.8	624.5	624.5	623.2	621.9	621.9	620.5	619.2	617.9
7.5°	616.6	615.2	613.9	611.3	610.0	608.6	607.3	604.7	603.3	602.0	602.0
10°	600.7	598.0	595.4	594.1	594.1	590.1	588.8	587.5	584.8	583.5	580.8
12.5°	580.8	578.2	575.6	572.9	571.6	568.9	567.6	565.0	562.3	559.7	557.0
15°	559.7	555.7	551.7	550.4	547.8	546.4	542.5	538.5	537.2	534.5	533.2
17.5°	533.2	527.9	526.6	524.0	521.3	518.7	516.0	512.0	508.1	506.8	502.8
20°	505.4	501.5	496.2	494.8	492.2	489.6	485.6	481.6	479.0	476.3	473.7
22.5°	475.0	472.4	465.7	464.4	461.8	457.8	453.8	449.9	448.5	444.6	441.9
25°	444.6	437.9	434.0	431.3	430.0	426.0	423.4	419.4	416.8	412.8	410.2
27.5°	410.2	406.2	402.2	398.3	396.9	394.3	390.3	386.3	383.7	379.7	377.1
30°	379.7	374.4	369.1	366.5	365.2	359.9	357.2	354.6	349.3	346.7	345.3
32.5°	345.3	340.0	336.1	336.1	332.1	329.5	324.2	321.5	320.2	314.9	312.3
35°	310.9	307.0	304.3	303.0	301.7	296.4	293.7	291.1	287.1	285.8	281.8
37.5°	276.5	271.2	268.6	267.3	265.9	264.6	263.3	259.3	256.7	254.0	251.4
40°	240.8	238.2	235.5	235.5	234.2	232.9	230.2	228.9	227.6	224.9	222.3
42.5°	210.4	206.4	205.1	203.8	203.8	201.1	201.1	199.8	198.5	195.8	193.2
45°	179.9	177.3	176.0	173.3	173.3	172.0	172.0	172.0	169.4	168.0	166.7
47.5°	153.5	150.8	149.5	148.2	146.9	145.5	145.5	145.5	142.9	142.9	140.2
50°	128.3	125.7	125.7	125.7	124.4	123.0	121.7	119.1	119.1	117.8	116.4
52.5°	108.5	105.8	104.5	103.2	103.2	101.9	100.6	99.2	96.6	95.3	93.9
55°	88.6	87.3	84.7	84.7	83.4	82.0	80.7	79.4	78.1	74.1	72.8
57.5°	72.8	70.1	68.8	67.5	67.5	66.2	63.5	62.2	59.5	56.9	54.2
60°	58.2	55.6	54.2	52.9	52.9	50.3	49.0	46.3	43.7	41.0	38.4
62.5°	45.0	43.7	41.0	39.7	39.7	38.4	35.7	33.1	30.4	27.8	23.8
65°	34.4	33.1	30.4	30.4	29.1	26.5	23.8	21.2	18.5	15.9	13.2
67.5°	25.1	23.8	22.5	21.2	19.8	17.2	14.6	11.9	9.3	6.6	4.0
70°	18.5	17.2	14.6	14.6	13.2	10.6	7.9	5.3	4.0	2.6	2.6
72.5°	11.9	10.6	9.3	7.9	6.6	5.3	2.6	1.3	1.3	1.3	1.3
75°	7.9	6.6	5.3	4.0	4.0	1.3	1.3	1.3	1.3	1.3	1.3
77.5°	5.3	4.0	2.6	1.3	1.3	0.0	1.3	1.3	0.0	1.3	1.3
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°	1.3	1.3	1.3	1.3	1.3	0.0	1.3	0.0	1.3	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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CATALOG NUMBER: PRS615D010-S6M12-61SWWH-4000K

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	640.4	640.4	640.4	640.4	640.4	640.4	640.4	640.4
2.5°	629.8	629.8	629.8	629.8	629.8	629.8	629.8	628.5
5°	616.6	616.6	616.6	616.6	615.2	615.2	615.2	615.2
7.5°	600.7	599.4	598.0	598.0	598.0	596.7	596.7	598.0
10°	579.5	579.5	578.2	578.2	576.9	576.9	576.9	575.6
12.5°	555.7	554.4	554.4	551.7	553.1	551.7	550.4	551.7
15°	529.2	527.9	526.6	526.6	526.6	525.3	525.3	526.6
17.5°	501.5	498.8	497.5	498.8	496.2	496.2	496.2	494.8
20°	471.0	468.4	467.1	467.1	465.7	464.4	464.4	464.4
22.5°	439.3	437.9	435.3	435.3	434.0	434.0	432.7	432.7
25°	408.8	404.9	404.9	403.5	400.9	402.2	399.6	399.6
27.5°	374.4	373.1	373.1	371.8	369.1	367.8	366.5	367.8
30°	342.7	340.0	338.7	337.4	337.4	337.4	336.1	334.7
32.5°	310.9	308.3	305.6	305.6	305.6	303.0	303.0	303.0
35°	279.2	277.9	275.2	273.9	273.9	272.6	271.2	269.9
37.5°	248.7	246.1	244.8	242.1	242.1	239.5	238.2	239.5
40°	218.3	215.7	214.3	214.3	211.7	209.1	209.1	209.1
42.5°	190.5	186.6	186.6	183.9	181.3	179.9	177.3	178.6
45°	164.1	160.1	158.8	158.8	153.5	152.2	150.8	150.8
47.5°	137.6	136.3	133.6	131.0	127.0	123.0	121.7	121.7
50°	113.8	109.8	108.5	107.2	101.9	99.2	96.6	96.6
52.5°	91.3	87.3	84.7	83.4	79.4	75.4	74.1	72.8
55°	70.1	66.2	64.8	63.5	58.2	55.6	52.9	51.6
57.5°	51.6	49.0	46.3	43.7	39.7	37.0	34.4	33.1
60°	35.7	31.8	30.4	29.1	25.1	22.5	19.8	19.8
62.5°	22.5	18.5	17.2	15.9	13.2	10.6	10.6	10.6
65°	9.3	6.6	6.6	6.6	5.3	5.3	5.3	5.3
67.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
70°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
72.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
75°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
77.5°	1.3	1.3	1.3	1.3	0.0	0.0	1.3	1.3
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

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