

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: P238380

Luminaire Tested: **PRS620D010-S6M12-61SWWMB-4000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238380  
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: PRS620D010-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: 1454.7 lumens  
Efficiency: N/A  
Efficacy: 72.7 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

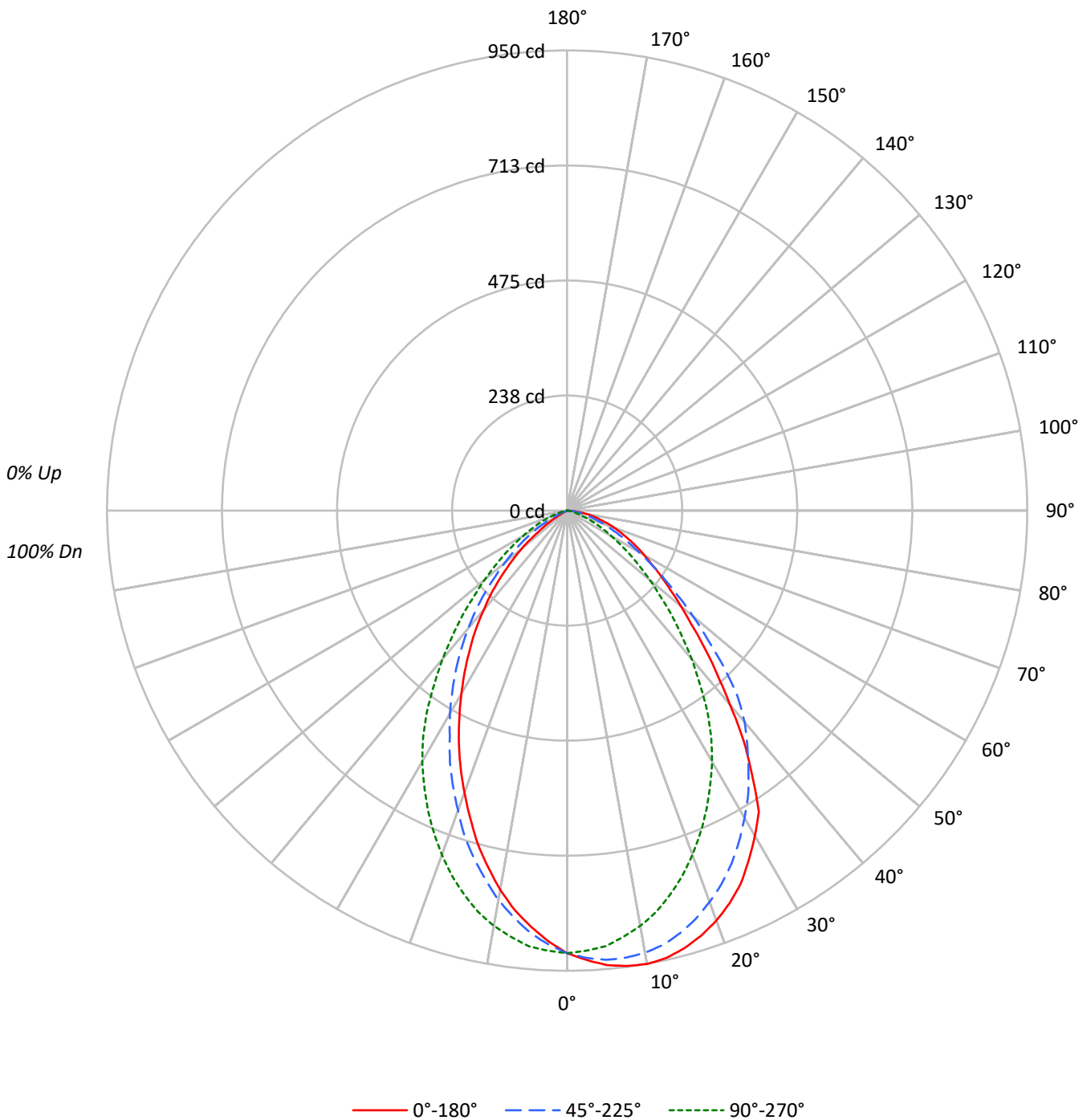
Input Watts (W): 20  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	90	80	72	67	88	78	72	67	76	70	66	74	69	65	72	68	64	62
5	83	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56
6	78	67	59	53	76	66	59	53	64	58	53	62	57	52	61	56	52	50
7	73	61	54	48	71	61	53	48	59	53	48	58	52	48	56	51	47	46
8	68	57	49	44	67	56	49	44	55	48	44	54	48	43	52	47	43	42
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38
10	61	49	42	37	60	48	42	37	47	41	37	47	41	37	46	40	37	35

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

	0°	90°	180°
0°	39340	39340	39340
5°	40705	39023	37251
10°	41551	38058	34753
15°	41691	36587	31773
20°	41269	34639	28403
25°	40328	32324	25141
30°	38555	29745	21691
35°	34969	26454	18391
40°	29378	22460	15052
45°	24466	18547	11703
50°	20544	14904	8246
55°	17836	11838	4376
60°	15810	9111	1119
65°	14304	6826	0
70°	13054	4620	0
75°	11495	2878	0
80°	10166	1612	0
85°	7460	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.1	5.9
10°-20°	230.8	15.9
20°-30°	314.5	21.6
30°-40°	321.0	22.1
40°-50°	248.2	17.1
50°-60°	149.9	10.3
60°-70°	71.8	4.9
70°-80°	27.8	1.9
80°-90°	5.6	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°	630.4	43.3
0°-40°	951.5	65.4
0°-60°	1349.5	92.8
0°-90°	1454.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1454.7	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	914	914	914	914	914	
5°	942	931	903	875	862	90
15°	935	903	821	743	713	263
25°	849	804	680	572	529	389
35°	665	652	503	400	350	413
45°	402	458	305	240	192	312
55°	238	244	158	112	58	214
65°	140	119	67	26	0	140
75°	69	50	17	0	0	75
85°	15	9	0	0	0	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°	913.7	913.7	913.7	913.7	913.7	913.7	913.7	913.7	913.7	913.7	913.7
2.5°	928.8	928.8	928.8	928.8	928.8	928.8	928.8	926.7	926.7	924.5	924.5
5°	941.8	941.8	941.8	939.6	939.6	937.5	937.5	935.3	935.3	931.0	931.0
7.5°	948.3	948.3	948.3	946.1	946.1	943.9	943.9	941.8	937.5	935.3	931.0
10°	950.4	950.4	948.3	948.3	943.9	943.9	943.9	939.6	935.3	931.0	926.7
12.5°	946.1	943.9	943.9	941.8	939.6	937.5	935.3	933.1	928.8	922.3	918.0
15°	935.3	935.3	935.3	933.1	928.8	926.7	926.7	922.3	915.9	909.4	902.9
17.5°	920.2	920.2	920.2	918.0	913.7	911.5	909.4	905.1	898.6	892.1	883.5
20°	900.7	900.7	898.6	896.4	892.1	892.1	889.9	883.5	877.0	868.3	859.7
22.5°	877.0	877.0	874.8	872.7	868.3	866.2	864.0	857.5	851.1	842.4	833.8
25°	848.9	846.7	844.6	842.4	840.3	835.9	833.8	829.5	823.0	812.2	803.5
27.5°	812.2	812.2	810.0	807.9	805.7	803.5	801.4	794.9	788.4	777.6	769.0
30°	775.5	775.5	773.3	771.1	769.0	766.8	762.5	756.0	751.7	743.1	732.3
32.5°	736.6	734.4	734.4	734.4	730.1	730.1	725.8	719.3	710.7	704.2	695.5
35°	665.3	667.4	669.6	676.1	678.2	682.6	682.6	680.4	671.8	663.1	652.3
37.5°	598.3	594.0	600.5	604.8	613.4	617.8	619.9	628.6	632.9	622.1	611.3
40°	522.7	527.0	531.4	537.8	546.5	548.6	555.1	561.6	572.4	576.7	570.2
42.5°	457.9	457.9	464.4	470.9	477.4	483.8	490.3	499.0	511.9	518.4	520.6
45°	401.8	399.6	401.8	410.4	419.0	423.4	427.7	438.5	451.4	460.1	457.9
47.5°	347.8	349.9	354.2	358.6	362.9	367.2	371.5	384.5	393.1	395.3	393.1
50°	306.7	304.6	308.9	311.0	317.5	319.7	324.0	330.5	337.0	339.1	339.1
52.5°	267.8	270.0	270.0	272.2	276.5	278.6	280.8	287.3	287.3	289.4	287.3
55°	237.6	235.4	237.6	239.8	241.9	244.1	246.2	246.2	246.2	246.2	244.1
57.5°	207.4	207.4	209.5	209.5	211.7	213.8	213.8	211.7	211.7	207.4	205.2
60°	183.6	183.6	183.6	183.6	185.8	185.8	185.8	181.4	177.1	177.1	170.6
62.5°	162.0	159.8	162.0	162.0	162.0	159.8	157.7	153.4	151.2	146.9	142.6
65°	140.4	140.4	140.4	140.4	138.2	138.2	136.1	131.8	127.4	125.3	118.8
67.5°	121.0	121.0	121.0	121.0	118.8	116.6	114.5	110.2	105.8	103.7	97.2
70°	103.7	101.5	101.5	101.5	99.4	97.2	95.0	92.9	88.6	84.2	79.9
72.5°	86.4	86.4	84.2	84.2	82.1	79.9	77.8	75.6	71.3	67.0	62.6
75°	69.1	69.1	69.1	67.0	64.8	64.8	62.6	58.3	56.2	51.8	49.7
77.5°	56.2	54.0	54.0	51.8	49.7	49.7	47.5	45.4	43.2	41.0	36.7
80°	41.0	41.0	41.0	38.9	36.7	36.7	34.6	32.4	30.2	28.1	25.9
82.5°	28.1	28.1	28.1	25.9	25.9	23.8	23.8	21.6	21.6	19.4	17.3
85°	15.1	15.1	15.1	15.1	15.1	13.0	13.0	13.0	10.8	10.8	8.6
87.5°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	2.2	2.2
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°	913.7	913.7	913.7	913.7	913.7	913.7	913.7	913.7	913.7	913.7	913.7
2.5°	922.3	922.3	920.2	918.0	918.0	915.9	913.7	913.7	911.5	909.4	907.2
5°	926.7	924.5	920.2	918.0	915.9	915.9	911.5	907.2	905.1	902.9	898.6
7.5°	926.7	922.3	918.0	913.7	911.5	909.4	902.9	898.6	894.3	887.8	883.5
10°	922.3	915.9	909.4	902.9	900.7	896.4	889.9	885.6	877.0	870.5	864.0
12.5°	911.5	905.1	896.4	887.8	883.5	879.1	870.5	864.0	855.4	848.9	840.3
15°	896.4	887.8	879.1	870.5	864.0	861.9	851.1	840.3	831.6	820.8	810.0
17.5°	874.8	866.2	855.4	846.7	840.3	835.9	823.0	812.2	801.4	790.6	779.8
20°	851.1	840.3	829.5	816.5	812.2	805.7	792.7	779.8	766.8	756.0	743.1
22.5°	823.0	812.2	799.2	788.4	779.8	773.3	760.3	745.2	732.3	719.3	706.3
25°	790.6	779.8	766.8	753.9	745.2	738.7	723.6	708.5	695.5	680.4	667.4
27.5°	758.2	745.2	732.3	715.0	708.5	699.9	684.7	669.6	654.5	639.4	624.2
30°	721.5	706.3	693.4	676.1	669.6	661.0	643.7	628.6	613.4	598.3	581.0
32.5°	682.6	667.4	652.3	637.2	628.6	619.9	604.8	587.5	568.1	553.0	540.0
35°	639.4	626.4	611.3	594.0	583.2	574.6	553.0	535.7	516.2	503.3	488.2
37.5°	600.5	583.2	563.8	542.2	531.4	520.6	499.0	481.7	466.6	449.3	436.3
40°	553.0	533.5	511.9	486.0	479.5	468.7	449.3	429.8	414.7	399.6	386.6
42.5°	501.1	479.5	460.1	438.5	427.7	416.9	397.4	378.0	362.9	349.9	337.0
45°	449.3	429.8	408.2	386.6	375.8	367.2	347.8	330.5	317.5	304.6	293.8
47.5°	391.0	378.0	358.6	339.1	326.2	317.5	302.4	287.3	272.2	259.2	252.7
50°	334.8	326.2	311.0	291.6	283.0	274.3	257.0	244.1	233.3	222.5	213.8
52.5°	283.0	276.5	265.7	248.4	241.9	231.1	218.2	207.4	196.6	187.9	181.4
55°	239.8	231.1	222.5	211.7	203.0	198.7	183.6	175.0	166.3	157.7	151.2
57.5°	198.7	194.4	185.8	177.1	170.6	164.2	153.4	144.7	138.2	129.6	125.3
60°	168.5	159.8	153.4	144.7	140.4	136.1	127.4	118.8	112.3	105.8	101.5
62.5°	138.2	131.8	125.3	116.6	114.5	110.2	103.7	95.0	90.7	84.2	79.9
65°	114.5	108.0	103.7	95.0	92.9	88.6	82.1	75.6	71.3	67.0	62.6
67.5°	92.9	88.6	82.1	75.6	73.4	69.1	62.6	58.3	54.0	49.7	47.5
70°	75.6	71.3	64.8	58.3	56.2	54.0	47.5	45.4	41.0	36.7	34.6
72.5°	60.5	56.2	49.7	45.4	43.2	41.0	36.7	32.4	30.2	25.9	23.8
75°	45.4	41.0	36.7	32.4	30.2	30.2	25.9	23.8	21.6	17.3	15.1
77.5°	34.6	30.2	25.9	23.8	21.6	19.4	17.3	15.1	13.0	10.8	8.6
80°	23.8	21.6	17.3	15.1	15.1	13.0	10.8	10.8	8.6	6.5	4.3
82.5°	15.1	13.0	10.8	8.6	8.6	8.6	6.5	4.3	4.3	4.3	2.2
85°	6.5	6.5	4.3	4.3	4.3	4.3	2.2	2.2	2.2	0.0	0.0
87.5°	2.2	2.2	0.0	2.2	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°	913.7	913.7	913.7	913.7	913.7	913.7	913.7	913.7	913.7	913.7	913.7
2.5°	907.2	905.1	902.9	902.9	900.7	900.7	898.6	898.6	896.4	896.4	894.3
5°	894.3	892.1	887.8	887.8	885.6	883.5	879.1	877.0	874.8	872.7	870.5
7.5°	879.1	872.7	868.3	866.2	864.0	859.7	855.4	851.1	846.7	844.6	840.3
10°	855.4	848.9	844.6	842.4	838.1	831.6	827.3	820.8	816.5	812.2	807.9
12.5°	831.6	823.0	814.3	812.2	807.9	799.2	794.9	786.3	779.8	775.5	771.1
15°	801.4	792.7	781.9	777.6	775.5	764.7	758.2	751.7	743.1	736.6	732.3
17.5°	766.8	758.2	747.4	740.9	736.6	727.9	717.1	710.7	704.2	693.4	689.0
20°	732.3	719.3	708.5	704.2	697.7	686.9	678.2	669.6	658.8	652.3	643.7
22.5°	691.2	680.4	667.4	661.0	656.6	643.7	635.0	624.2	615.6	609.1	598.3
25°	654.5	639.4	626.4	619.9	613.4	602.6	589.7	581.0	572.4	563.8	555.1
27.5°	611.3	596.2	583.2	578.9	572.4	557.3	548.6	535.7	524.9	518.4	509.8
30°	568.1	553.0	540.0	533.5	527.0	514.1	503.3	492.5	483.8	475.2	466.6
32.5°	524.9	511.9	499.0	492.5	486.0	473.0	462.2	449.3	440.6	429.8	421.2
35°	475.2	462.2	451.4	445.0	440.6	429.8	419.0	408.2	399.6	388.8	380.2
37.5°	423.4	410.4	403.9	397.4	393.1	384.5	375.8	367.2	358.6	349.9	339.1
40°	373.7	367.2	354.2	352.1	347.8	339.1	332.6	324.0	317.5	308.9	300.2
42.5°	328.3	317.5	308.9	306.7	302.4	295.9	289.4	283.0	278.6	270.0	263.5
45°	285.1	276.5	267.8	263.5	261.4	254.9	248.4	244.1	239.8	233.3	226.8
47.5°	244.1	235.4	229.0	226.8	222.5	218.2	211.7	207.4	200.9	196.6	190.1
50°	207.4	200.9	194.4	192.2	187.9	185.8	179.3	175.0	168.5	162.0	157.7
52.5°	175.0	168.5	164.2	162.0	159.8	153.4	149.0	144.7	138.2	133.9	127.4
55°	144.7	140.4	136.1	133.9	131.8	127.4	123.1	116.6	112.3	105.8	99.4
57.5°	118.8	114.5	110.2	108.0	105.8	101.5	97.2	92.9	86.4	79.9	73.4
60°	95.0	92.9	88.6	86.4	84.2	79.9	75.6	69.1	64.8	56.2	51.8
62.5°	75.6	73.4	69.1	67.0	64.8	58.3	54.0	49.7	43.2	36.7	30.2
65°	58.3	54.0	49.7	49.7	47.5	43.2	36.7	30.2	25.9	19.4	13.0
67.5°	43.2	38.9	34.6	34.6	32.4	28.1	21.6	17.3	10.8	6.5	0.0
70°	30.2	28.1	23.8	21.6	19.4	15.1	10.8	6.5	2.2	0.0	0.0
72.5°	21.6	17.3	15.1	13.0	10.8	6.5	2.2	0.0	0.0	0.0	0.0
75°	13.0	10.8	6.5	6.5	4.3	2.2	0.0	0.0	0.0	0.0	0.0
77.5°	6.5	6.5	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	4.3	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	2.2	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





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CATALOG NUMBER: PRS620D010-S6M12-61SWWMB-4000K

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	913.7	913.7	913.7	913.7	913.7	913.7	913.7	913.7
2.5°	894.3	892.1	892.1	892.1	892.1	892.1	889.9	889.9
5°	868.3	866.2	866.2	864.0	864.0	864.0	861.9	861.9
7.5°	838.1	835.9	833.8	833.8	831.6	831.6	829.5	831.6
10°	803.5	799.2	799.2	799.2	797.1	794.9	794.9	794.9
12.5°	766.8	762.5	760.3	758.2	756.0	756.0	753.9	753.9
15°	725.8	721.5	719.3	717.1	715.0	712.8	710.7	712.8
17.5°	682.6	678.2	676.1	673.9	669.6	669.6	667.4	665.3
20°	637.2	632.9	630.7	628.6	626.4	624.2	622.1	619.9
22.5°	591.8	589.7	583.2	583.2	578.9	576.7	574.6	574.6
25°	546.5	542.2	540.0	535.7	531.4	529.2	529.2	529.2
27.5°	501.1	496.8	492.5	490.3	488.2	486.0	481.7	481.7
30°	457.9	451.4	447.1	447.1	442.8	438.5	438.5	436.3
32.5°	414.7	408.2	403.9	401.8	399.6	395.3	393.1	393.1
35°	371.5	365.0	362.9	358.6	354.2	354.2	347.8	349.9
37.5°	332.6	324.0	321.8	319.7	313.2	311.0	308.9	311.0
40°	291.6	285.1	280.8	278.6	274.3	270.0	267.8	267.8
42.5°	252.7	248.4	244.1	241.9	235.4	231.1	229.0	231.1
45°	218.2	211.7	209.5	205.2	198.7	194.4	192.2	192.2
47.5°	183.6	179.3	172.8	170.6	164.2	159.8	155.5	155.5
50°	151.2	144.7	140.4	136.1	131.8	125.3	121.0	123.1
52.5°	121.0	112.3	110.2	105.8	99.4	92.9	88.6	88.6
55°	92.9	86.4	82.1	79.9	71.3	64.8	60.5	58.3
57.5°	67.0	60.5	58.3	54.0	47.5	41.0	34.6	34.6
60°	45.4	38.9	34.6	32.4	25.9	21.6	15.1	13.0
62.5°	23.8	19.4	15.1	13.0	8.6	4.3	4.3	2.2
65°	6.5	2.2	2.2	2.2	2.2	2.2	2.2	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)