

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: P238338

Luminaire Tested: **PRS610D010-S6M12-61SWWH-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P238338
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: PRS610D010-S6M12-61SWWH-3000K
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" WALL WASH DISTRIBUTION, WW TRIM HAZE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 691.2 lumens
Efficiency: N/A
Efficacy: 69.1 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

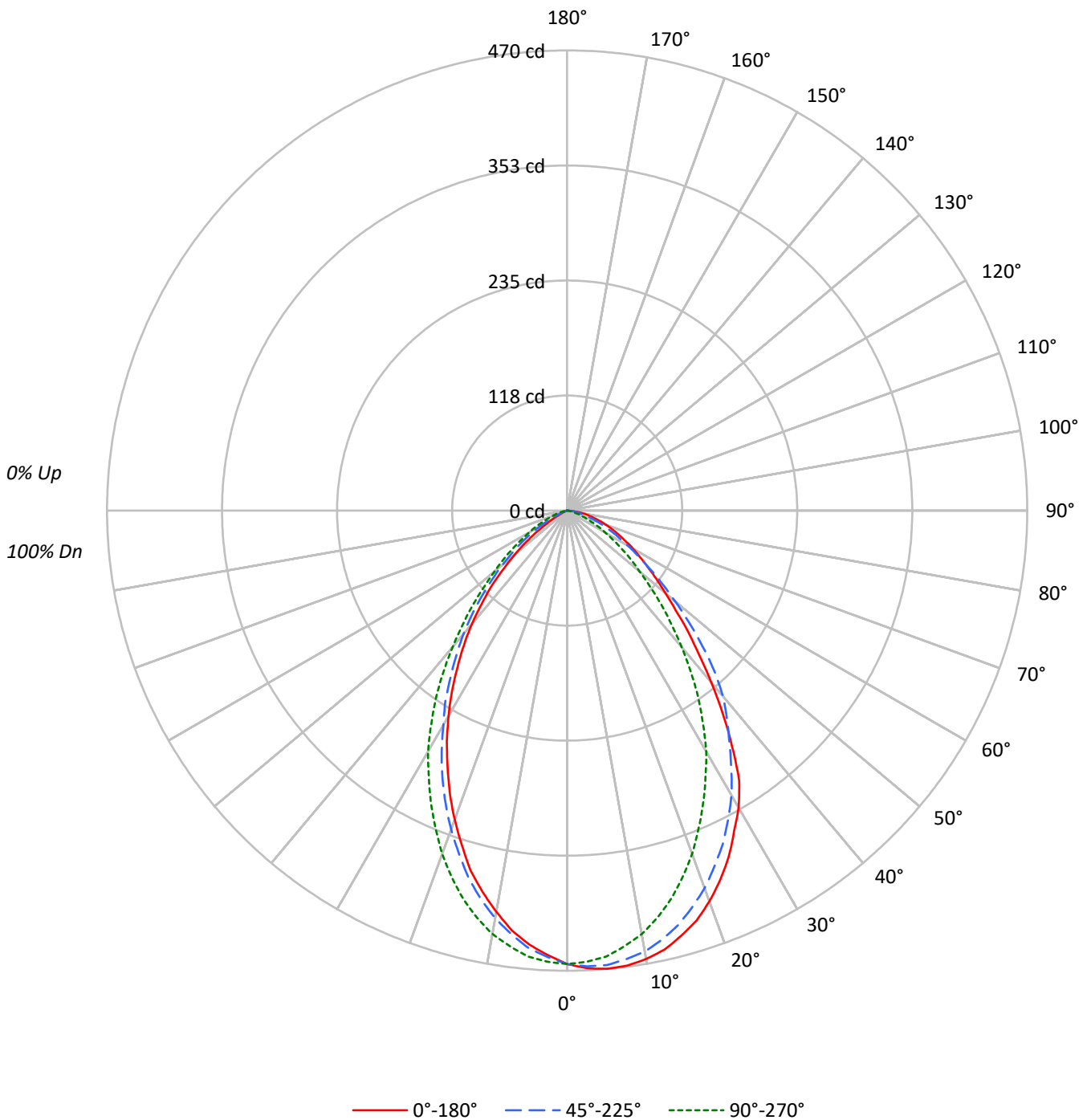
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90
2	104	98	92	88	102	96	91	87	93	89	85	89	86	83	87	84	81	80
3	97	88	82	77	95	87	81	76	84	79	75	82	77	74	79	76	73	71
4	90	81	73	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	60	71	64	60	69	63	59	67	62	59	57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51
7	74	62	55	50	72	61	54	49	60	54	49	59	53	49	57	52	48	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43
9	65	54	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	19939	19939	19939
5°	20305	19765	19229
10°	20330	19202	18196
15°	20045	18298	16974
20°	19464	17095	15386
25°	18547	15634	13725
30°	17411	14129	12036
35°	15437	12273	10260
40°	12854	10218	8498
45°	10601	8275	6643
50°	8781	6471	4675
55°	7544	5097	2800
60°	6674	3875	1240
65°	5848	2822	387
70°	5300	1926	239
75°	4608	1281	166
80°	4042	719	0
85°	2816	494	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.1	6.2
10°-20°	115.7	16.7
20°-30°	154.2	22.3
30°-40°	152.2	22.0
40°-50°	114.1	16.5
50°-60°	67.0	9.7
60°-70°	31.2	4.5
70°-80°	11.7	1.7
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°	312.9	45.3
0°-40°	465.0	67.3
0°-60°	646.1	93.5
0°-90°	691.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	691.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	463	463	463	463	463	
5°	470	466	457	449	445	45
15°	450	438	410	388	381	126
25°	390	376	329	301	289	179
35°	294	289	234	208	195	182
45°	174	195	136	122	109	135
55°	100	102	68	56	37	91
65°	57	50	28	13	4	58
75°	28	20	8	1	1	30
85°	6	3	1	0	0	7
90°	0	0	0	0	0	



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CATALOG NUMBER: PRS610D010-S6M12-61SWWH-3000K

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	463.1	463.1	463.1	463.1	463.1	463.1	463.1	463.1	463.1	463.1	463.1
2.5°	467.9	467.9	467.9	467.9	466.9	466.9	466.9	466.9	466.9	466.0	466.0
5°	469.8	469.8	468.8	468.8	468.8	468.8	467.9	467.9	466.9	466.9	466.0
7.5°	468.8	467.9	467.9	467.9	466.9	466.9	466.9	466.0	465.0	464.0	462.1
10°	465.0	465.0	465.0	464.0	463.1	463.1	463.1	461.2	460.2	458.3	457.3
12.5°	459.3	458.3	458.3	457.3	456.4	456.4	455.4	453.5	452.6	450.6	448.7
15°	449.7	449.7	449.7	448.7	447.8	446.8	445.9	444.9	443.0	441.1	438.2
17.5°	439.2	438.2	438.2	437.3	435.3	435.3	434.4	432.5	430.6	428.6	424.8
20°	424.8	424.8	424.8	423.9	422.9	421.0	421.0	418.1	416.2	413.3	410.5
22.5°	408.5	408.5	408.5	407.6	406.6	405.7	404.7	402.8	399.9	397.1	393.2
25°	390.4	389.4	389.4	389.4	388.5	387.5	386.5	384.6	382.7	379.8	376.0
27.5°	369.3	368.4	368.4	368.4	367.4	366.4	365.5	365.5	363.6	359.8	355.9
30°	350.2	350.2	350.2	348.3	346.4	345.4	345.4	343.5	340.6	338.7	335.8
32.5°	327.2	327.2	328.2	327.2	327.2	327.2	325.3	323.4	319.6	316.7	311.9
35°	293.7	295.6	296.6	298.5	300.4	302.3	303.3	303.3	299.5	294.7	288.9
37.5°	261.2	262.2	263.1	266.9	268.9	270.8	271.7	275.6	278.4	273.6	267.9
40°	228.7	229.6	232.5	233.5	238.2	239.2	242.1	245.9	249.7	250.7	247.8
42.5°	199.0	200.0	201.9	203.8	208.6	211.4	212.4	215.3	220.1	223.9	222.9
45°	174.1	174.1	175.1	178.0	180.8	182.7	185.6	189.4	193.3	195.2	195.2
47.5°	150.2	150.2	151.2	154.0	157.9	157.9	159.8	163.6	168.4	168.4	168.4
50°	131.1	132.0	132.0	133.9	135.9	136.8	138.7	142.6	144.5	144.5	143.5
52.5°	114.8	114.8	115.8	116.7	117.7	119.6	119.6	121.5	123.4	123.4	121.5
55°	100.5	100.5	100.5	101.4	102.4	103.3	104.3	105.2	104.3	103.3	102.4
57.5°	88.0	88.0	88.0	88.0	89.0	89.9	89.9	89.9	89.0	88.0	85.2
60°	77.5	77.5	77.5	77.5	77.5	77.5	77.5	76.5	74.6	73.7	71.8
62.5°	67.0	67.0	67.0	67.0	67.0	67.0	66.0	65.1	64.1	61.2	59.3
65°	57.4	58.4	58.4	57.4	57.4	56.5	56.5	54.5	53.6	51.7	49.8
67.5°	49.8	49.8	49.8	49.8	48.8	47.8	47.8	45.9	45.0	43.1	40.2
70°	42.1	42.1	41.1	41.1	41.1	40.2	39.2	38.3	36.4	34.4	32.5
72.5°	34.4	34.4	34.4	34.4	32.5	32.5	31.6	30.6	28.7	27.7	25.8
75°	27.7	27.7	27.7	26.8	26.8	25.8	24.9	23.9	23.0	21.0	20.1
77.5°	22.0	22.0	22.0	21.0	20.1	20.1	19.1	18.2	17.2	16.3	14.4
80°	16.3	16.3	15.3	15.3	14.4	14.4	14.4	13.4	12.4	11.5	10.5
82.5°	10.5	10.5	10.5	10.5	9.6	9.6	8.6	8.6	7.7	6.7	6.7
85°	5.7	5.7	5.7	5.7	4.8	4.8	4.8	4.8	3.8	3.8	2.9
87.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.9	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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	463.1	463.1	463.1	463.1	463.1	463.1	463.1	463.1	463.1	463.1	463.1
2.5°	465.0	465.0	464.0	464.0	464.0	463.1	463.1	462.1	462.1	461.2	461.2
5°	465.0	464.0	463.1	462.1	461.2	461.2	460.2	458.3	457.3	457.3	455.4
7.5°	461.2	460.2	458.3	457.3	456.4	455.4	453.5	452.6	450.6	448.7	447.8
10°	455.4	453.5	450.6	448.7	448.7	446.8	444.9	443.0	440.1	439.2	436.3
12.5°	445.9	443.0	441.1	439.2	437.3	436.3	433.4	431.5	427.7	425.8	422.9
15°	435.3	432.5	429.6	425.8	424.8	422.9	420.0	416.2	414.3	410.5	407.6
17.5°	422.9	418.1	415.2	411.4	409.5	407.6	402.8	399.9	397.1	392.3	389.4
20°	406.6	402.8	399.0	394.2	392.3	389.4	385.6	380.8	377.0	373.1	369.3
22.5°	389.4	385.6	380.8	376.0	373.1	370.3	365.5	360.7	355.9	351.1	348.3
25°	370.3	365.5	360.7	355.9	352.1	350.2	344.4	339.7	333.9	329.1	325.3
27.5°	351.1	346.4	340.6	333.9	330.1	328.2	322.4	315.7	310.0	306.2	301.4
30°	330.1	324.3	317.7	311.9	308.1	305.2	300.4	293.7	288.9	284.2	277.5
32.5°	307.1	301.4	296.6	288.9	286.1	283.2	276.5	269.8	263.1	258.3	254.5
35°	284.2	280.3	274.6	266.9	262.2	258.3	249.7	244.0	238.2	233.5	229.6
37.5°	263.1	257.4	247.8	239.2	235.4	232.5	222.9	217.2	210.5	207.6	201.9
40°	240.2	231.5	222.9	214.3	210.5	206.7	200.0	191.4	186.6	181.8	178.0
42.5°	217.2	205.7	197.1	189.4	184.7	180.8	173.2	166.5	160.7	157.9	154.0
45°	191.4	182.7	173.2	164.6	161.7	156.9	150.2	144.5	139.7	135.9	133.0
47.5°	164.6	159.8	150.2	142.6	138.7	134.9	129.2	123.4	118.6	114.8	112.9
50°	140.6	136.8	130.1	121.5	118.6	114.8	109.1	105.2	100.5	96.6	94.7
52.5°	118.6	114.8	110.0	103.3	99.5	97.6	91.9	88.0	85.2	82.3	79.4
55°	99.5	95.7	91.9	86.1	83.2	80.4	76.5	72.7	69.8	67.9	66.0
57.5°	83.2	79.4	75.6	71.8	68.9	67.0	63.1	61.2	58.4	55.5	54.5
60°	68.9	66.0	63.1	59.3	57.4	54.5	51.7	48.8	46.9	45.0	43.1
62.5°	57.4	54.5	51.7	47.8	46.9	45.0	42.1	39.2	37.3	36.4	34.4
65°	46.9	44.0	42.1	39.2	37.3	36.4	33.5	31.6	29.7	27.7	25.8
67.5°	38.3	36.4	34.4	31.6	29.7	28.7	25.8	23.9	23.0	21.0	20.1
70°	30.6	28.7	26.8	24.9	23.0	22.0	20.1	18.2	17.2	15.3	14.4
72.5°	23.9	22.0	21.0	18.2	17.2	16.3	14.4	13.4	12.4	11.5	10.5
75°	18.2	17.2	15.3	13.4	12.4	12.4	10.5	9.6	8.6	7.7	6.7
77.5°	13.4	12.4	10.5	9.6	8.6	8.6	7.7	6.7	5.7	4.8	4.8
80°	9.6	7.7	6.7	5.7	5.7	4.8	4.8	3.8	2.9	2.9	1.9
82.5°	5.7	4.8	3.8	3.8	2.9	2.9	2.9	1.9	1.9	1.0	1.0
85°	2.9	1.9	1.9	1.9	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	463.1	463.1	463.1	463.1	463.1	463.1	463.1	463.1	463.1	463.1	463.1
2.5°	460.2	459.3	459.3	459.3	458.3	458.3	457.3	457.3	456.4	456.4	456.4
5°	454.5	453.5	452.6	451.6	451.6	450.6	449.7	449.7	448.7	447.8	446.8
7.5°	445.9	444.9	443.9	442.0	441.1	440.1	439.2	437.3	436.3	435.3	435.3
10°	434.4	432.5	430.6	429.6	429.6	426.7	425.8	424.8	422.9	421.9	420.0
12.5°	420.0	418.1	416.2	414.3	413.3	411.4	410.5	408.5	406.6	404.7	402.8
15°	404.7	401.8	399.0	398.0	396.1	395.2	392.3	389.4	388.5	386.5	385.6
17.5°	385.6	381.8	380.8	378.9	377.0	375.1	373.1	370.3	367.4	366.4	363.6
20°	365.5	362.6	358.8	357.8	355.9	354.0	351.1	348.3	346.4	344.4	342.5
22.5°	343.5	341.6	336.8	335.8	333.9	331.0	328.2	325.3	324.3	321.5	319.6
25°	321.5	316.7	313.8	311.9	311.0	308.1	306.2	303.3	301.4	298.5	296.6
27.5°	296.6	293.7	290.9	288.0	287.0	285.1	282.3	279.4	277.5	274.6	272.7
30°	274.6	270.8	266.9	265.0	264.1	260.2	258.3	256.4	252.6	250.7	249.7
32.5°	249.7	245.9	243.0	243.0	240.2	238.2	234.4	232.5	231.5	227.7	225.8
35°	224.8	222.0	220.1	219.1	218.1	214.3	212.4	210.5	207.6	206.7	203.8
37.5°	200.0	196.1	194.2	193.3	192.3	191.4	190.4	187.5	185.6	183.7	181.8
40°	174.1	172.2	170.3	170.3	169.4	168.4	166.5	165.5	164.6	162.7	160.7
42.5°	152.1	149.3	148.3	147.3	147.3	145.4	145.4	144.5	143.5	141.6	139.7
45°	130.1	128.2	127.3	125.3	125.3	124.4	124.4	124.4	122.5	121.5	120.6
47.5°	111.0	109.1	108.1	107.2	106.2	105.2	105.2	105.2	103.3	103.3	101.4
50°	92.8	90.9	90.9	90.9	89.9	89.0	88.0	86.1	86.1	85.2	84.2
52.5°	78.5	76.5	75.6	74.6	74.6	73.7	72.7	71.8	69.8	68.9	67.9
55°	64.1	63.1	61.2	61.2	60.3	59.3	58.4	57.4	56.5	53.6	52.6
57.5°	52.6	50.7	49.8	48.8	48.8	47.8	45.9	45.0	43.1	41.1	39.2
60°	42.1	40.2	39.2	38.3	38.3	36.4	35.4	33.5	31.6	29.7	27.7
62.5°	32.5	31.6	29.7	28.7	28.7	27.7	25.8	23.9	22.0	20.1	17.2
65°	24.9	23.9	22.0	22.0	21.0	19.1	17.2	15.3	13.4	11.5	9.6
67.5°	18.2	17.2	16.3	15.3	14.4	12.4	10.5	8.6	6.7	4.8	2.9
70°	13.4	12.4	10.5	10.5	9.6	7.7	5.7	3.8	2.9	1.9	1.9
72.5°	8.6	7.7	6.7	5.7	4.8	3.8	1.9	1.0	1.0	1.0	1.0
75°	5.7	4.8	3.8	2.9	2.9	1.0	1.0	1.0	1.0	1.0	1.0
77.5°	3.8	2.9	1.9	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0
80°	1.9	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	1.0	1.0	1.0	1.0	0.0	1.0	0.0	1.0	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):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	463.1	463.1	463.1	463.1	463.1	463.1	463.1	463.1
2.5°	455.4	455.4	455.4	455.4	455.4	455.4	455.4	454.5
5°	445.9	445.9	445.9	445.9	444.9	444.9	444.9	444.9
7.5°	434.4	433.4	432.5	432.5	432.5	431.5	431.5	432.5
10°	419.1	419.1	418.1	418.1	417.2	417.2	417.2	416.2
12.5°	401.8	400.9	400.9	399.0	399.9	399.0	398.0	399.0
15°	382.7	381.8	380.8	380.8	380.8	379.8	379.8	380.8
17.5°	362.6	360.7	359.8	360.7	358.8	358.8	358.8	357.8
20°	340.6	338.7	337.7	337.7	336.8	335.8	335.8	335.8
22.5°	317.7	316.7	314.8	314.8	313.8	313.8	312.9	312.9
25°	295.6	292.8	292.8	291.8	289.9	290.9	288.9	288.9
27.5°	270.8	269.8	269.8	268.9	266.9	266.0	265.0	266.0
30°	247.8	245.9	244.9	244.0	244.0	244.0	243.0	242.1
32.5°	224.8	222.9	221.0	221.0	221.0	219.1	219.1	219.1
35°	201.9	200.9	199.0	198.1	198.1	197.1	196.1	195.2
37.5°	179.9	178.0	177.0	175.1	175.1	173.2	172.2	173.2
40°	157.9	156.0	155.0	155.0	153.1	151.2	151.2	151.2
42.5°	137.8	134.9	134.9	133.0	131.1	130.1	128.2	129.2
45°	118.6	115.8	114.8	114.8	111.0	110.0	109.1	109.1
47.5°	99.5	98.5	96.6	94.7	91.9	89.0	88.0	88.0
50°	82.3	79.4	78.5	77.5	73.7	71.8	69.8	69.8
52.5°	66.0	63.1	61.2	60.3	57.4	54.5	53.6	52.6
55°	50.7	47.8	46.9	45.9	42.1	40.2	38.3	37.3
57.5°	37.3	35.4	33.5	31.6	28.7	26.8	24.9	23.9
60°	25.8	23.0	22.0	21.0	18.2	16.3	14.4	14.4
62.5°	16.3	13.4	12.4	11.5	9.6	7.7	7.7	7.7
65°	6.7	4.8	4.8	4.8	3.8	3.8	3.8	3.8
67.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
70°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
72.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
75°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
77.5°	1.0	1.0	1.0	1.0	0.0	0.0	1.0	1.0
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)