

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: P238323

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P238323
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-25)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS610D010-S6M12-61SWWC-3000K
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" WALL WASH DISTRIBUTION, WW TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 706.5 lumens
Efficiency: N/A
Efficacy: 70.7 lumens/watt
Spacing Criteria (0/90/45): 0.98 / 0.94 / 1.03
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

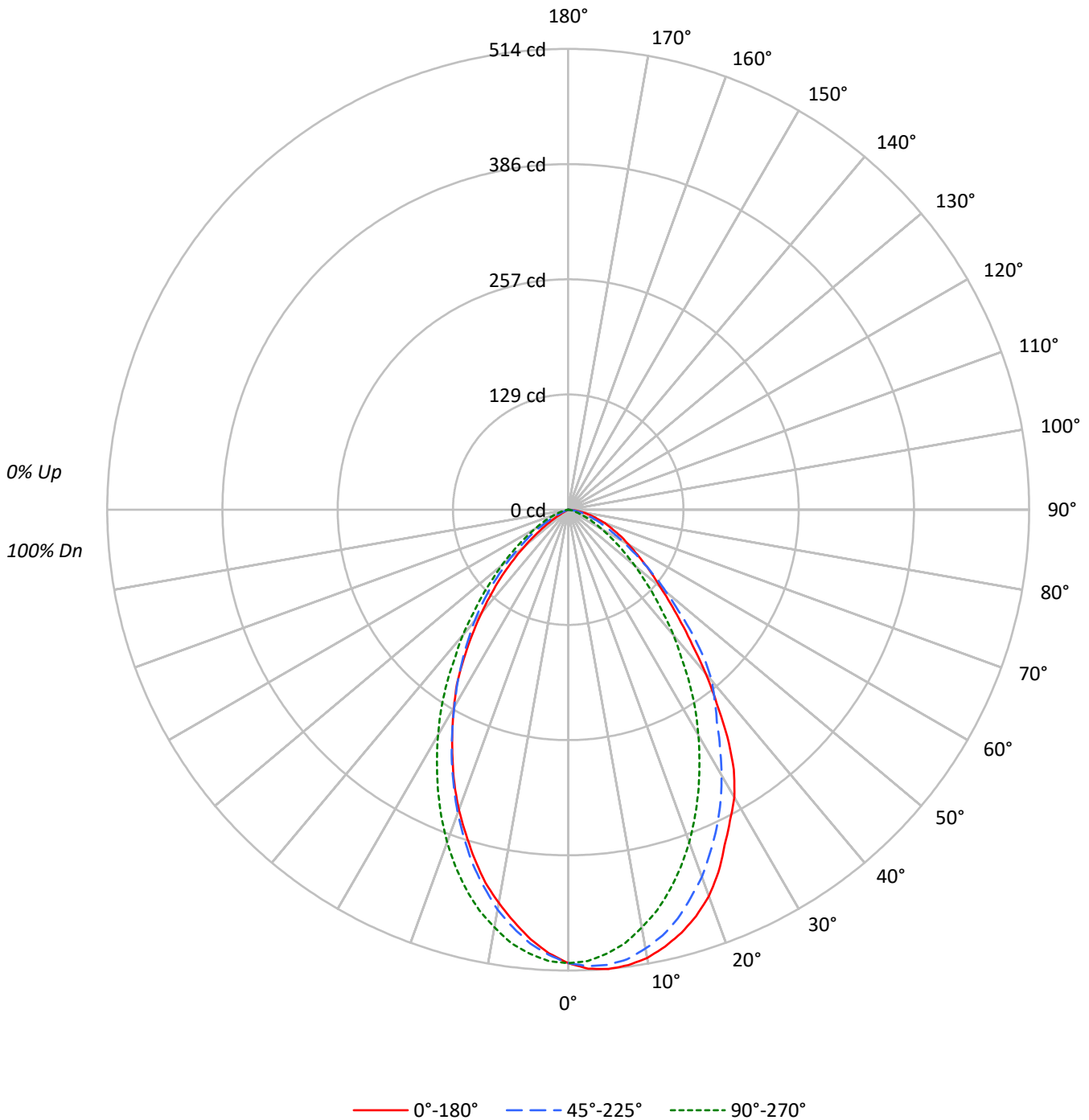
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	101	102	100	98	98	96	95	95	93	92	90					90			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80					80			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	74	80	76	73	71					71			
4	91	81	74	69	89	80	73	68	78	72	67	75	71	67	73	69	66	64					64			
5	85	74	67	62	83	73	66	61	71	65	61	69	64	60	68	63	60	58					58			
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52					52			
7	74	63	56	50	73	62	55	50	61	55	50	60	54	50	58	53	49	48					48			
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44					44			
9	66	54	47	42	65	54	47	42	53	47	42	52	46	42	51	46	42	40					40			
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	48	42	39	37					37			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	21773	21773	21773
5°	22228	21480	20780
10°	22192	20684	19468
15°	21770	19550	17972
20°	21017	18080	16325
25°	19611	16333	14513
30°	18425	14428	12663
35°	16257	12383	10670
40°	13405	10280	8453
45°	10844	8220	6357
50°	8982	6477	4233
55°	7694	4962	2297
60°	6682	3711	663
65°	5950	2730	0
70°	5426	1813	0
75°	4625	1115	0
80°	4042	719	0
85°	2816	494	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.8	6.6
10°-20°	123.6	17.5
20°-30°	160.5	22.7
30°-40°	154.3	21.8
40°-50°	113.6	16.1
50°-60°	65.2	9.2
60°-70°	29.5	4.2
70°-80°	11.0	1.6
80°-90°	2.1	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°	330.8	46.8
0°-40°	485.1	68.7
0°-60°	663.9	94.0
0°-90°	706.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	706.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	506	506	506	506	506	
5°	514	510	497	486	481	49
15°	488	472	439	410	403	137
25°	413	392	344	307	306	190
35°	309	289	236	206	203	191
45°	178	195	135	121	104	139
55°	102	101	66	54	31	93
65°	58	47	27	12	0	58
75°	28	19	7	0	0	30
85°	6	3	1	0	0	7
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°	505.7	505.7	505.7	505.7	505.7	505.7	505.7	505.7	505.7	505.7	505.7
2.5°	512.4	512.4	512.4	511.4	511.4	512.4	511.4	511.4	510.5	510.5	509.5
5°	514.3	514.3	514.3	514.3	513.3	513.3	513.3	512.4	511.4	510.5	509.5
7.5°	512.4	512.4	512.4	512.4	511.4	511.4	510.5	509.5	508.5	506.6	505.7
10°	507.6	507.6	507.6	506.6	505.7	504.7	504.7	502.8	500.9	499.0	497.0
12.5°	499.0	499.0	498.0	498.0	496.1	496.1	495.1	493.2	491.3	489.4	486.5
15°	488.4	487.5	487.5	486.5	484.6	483.6	482.7	479.8	476.9	474.1	472.1
17.5°	475.0	474.1	473.1	472.1	469.3	467.4	466.4	463.5	460.7	457.8	454.0
20°	458.7	457.8	456.8	454.9	453.0	451.1	449.2	446.3	442.5	438.6	435.8
22.5°	437.7	436.7	435.8	434.8	431.9	430.0	429.1	426.2	422.3	418.5	413.7
25°	412.8	412.8	413.7	410.9	408.9	407.0	407.0	404.2	400.3	395.5	391.7
27.5°	390.7	390.7	388.8	386.9	384.0	382.1	381.2	378.3	376.4	372.5	367.8
30°	370.6	369.7	367.8	365.8	363.0	360.1	357.2	353.4	349.6	345.7	341.9
32.5°	343.8	342.9	342.9	342.9	340.0	339.0	337.1	332.3	327.5	320.8	315.1
35°	309.3	308.4	307.4	308.4	310.3	311.3	312.2	310.3	305.5	297.8	289.2
37.5°	272.0	272.9	273.9	274.9	277.7	279.7	278.7	282.5	281.6	276.8	268.2
40°	238.5	238.5	239.4	242.3	245.2	246.1	247.1	250.9	250.9	251.9	249.0
42.5°	204.9	207.8	208.8	210.7	213.6	215.5	217.4	221.2	222.2	226.0	224.1
45°	178.1	180.0	182.0	183.9	186.8	188.7	189.6	192.5	195.4	197.3	195.4
47.5°	154.2	155.1	156.1	158.0	160.9	161.9	163.8	166.6	169.5	168.6	166.6
50°	134.1	135.0	135.0	137.9	139.8	140.8	140.8	144.6	144.6	144.6	142.7
52.5°	117.8	117.8	118.8	119.7	121.6	121.6	123.5	125.5	123.5	122.6	120.7
55°	102.5	102.5	103.4	104.4	104.4	105.3	106.3	106.3	104.4	102.5	100.6
57.5°	89.1	90.0	90.0	91.0	91.9	91.0	91.9	90.0	88.1	86.2	83.3
60°	77.6	78.5	78.5	79.5	79.5	79.5	78.5	76.6	73.7	71.8	69.0
62.5°	68.0	68.0	68.0	68.0	68.0	68.0	67.0	65.1	62.3	60.3	57.5
65°	58.4	58.4	58.4	58.4	57.5	57.5	56.5	54.6	51.7	49.8	46.9
67.5°	49.8	49.8	49.8	49.8	48.8	47.9	46.9	46.0	43.1	41.2	39.3
70°	43.1	42.1	42.1	41.2	40.2	39.3	39.3	37.4	35.4	33.5	31.6
72.5°	34.5	34.5	34.5	34.5	32.6	32.6	31.6	29.7	27.8	26.8	24.9
75°	27.8	27.8	27.8	26.8	25.9	25.9	24.9	23.9	22.0	21.1	19.2
77.5°	22.0	22.0	22.0	21.1	20.1	19.2	19.2	18.2	16.3	15.3	14.4
80°	16.3	16.3	15.3	14.4	14.4	13.4	13.4	12.5	11.5	10.5	9.6
82.5°	10.5	10.5	10.5	9.6	9.6	8.6	8.6	8.6	7.7	6.7	5.7
85°	5.7	5.7	5.7	4.8	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	1.9	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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	505.7	505.7	505.7	505.7	505.7	505.7	505.7	505.7	505.7	505.7	505.7
2.5°	509.5	508.5	507.6	507.6	506.6	506.6	505.7	504.7	503.8	503.8	502.8
5°	508.5	507.6	505.7	504.7	503.8	502.8	501.8	499.9	499.0	497.0	496.1
7.5°	503.8	501.8	499.9	498.0	497.0	496.1	493.2	491.3	489.4	487.5	485.6
10°	495.1	493.2	490.3	488.4	486.5	484.6	482.7	478.9	476.0	473.1	470.2
12.5°	483.6	480.8	477.9	474.1	473.1	471.2	468.3	464.5	461.6	457.8	454.0
15°	469.3	464.5	462.6	457.8	455.9	454.0	451.1	447.2	443.4	438.6	434.8
17.5°	450.1	445.3	443.4	438.6	436.7	434.8	430.0	426.2	422.3	417.6	412.8
20°	431.0	427.1	422.3	417.6	415.6	413.7	408.0	404.2	400.3	394.6	390.7
22.5°	408.9	404.2	399.4	395.5	392.7	390.7	386.0	381.2	375.4	369.7	364.9
25°	386.9	381.2	376.4	371.6	367.8	365.8	360.1	354.4	348.6	343.8	338.1
27.5°	362.0	357.2	351.5	344.8	341.9	339.0	333.3	326.6	321.8	317.0	311.3
30°	336.2	331.4	324.7	318.9	316.0	313.2	307.4	301.7	296.9	290.2	284.4
32.5°	310.3	305.5	299.8	294.0	292.1	288.3	281.6	276.8	270.1	263.4	258.6
35°	285.4	281.6	275.8	269.1	264.3	260.5	253.8	246.1	240.4	235.6	230.8
37.5°	262.4	256.7	249.0	240.4	235.6	231.8	223.1	217.4	212.6	206.9	204.9
40°	238.5	228.9	220.3	211.7	207.8	203.0	196.3	190.6	186.8	182.9	178.1
42.5°	215.5	203.0	193.5	185.8	181.0	178.1	170.5	166.6	161.9	157.1	155.1
45°	189.6	180.0	168.6	160.9	157.1	154.2	147.5	142.7	137.9	135.0	132.2
47.5°	163.8	156.1	145.6	137.0	134.1	131.2	126.4	120.7	116.8	114.0	111.1
50°	137.9	132.2	126.4	116.8	114.0	113.0	107.3	102.5	98.6	96.7	93.9
52.5°	116.8	112.1	106.3	99.6	96.7	93.9	90.0	85.2	83.3	80.4	78.5
55°	96.7	91.9	89.1	84.3	80.4	78.5	74.7	71.8	69.0	66.1	64.2
57.5°	79.5	76.6	73.7	69.9	68.0	66.1	62.3	59.4	56.5	53.6	51.7
60°	66.1	63.2	60.3	57.5	55.5	54.6	50.8	47.9	45.0	43.1	41.2
62.5°	54.6	52.7	49.8	46.9	45.0	44.1	41.2	38.3	35.4	34.5	32.6
65°	45.0	43.1	40.2	37.4	37.4	35.4	32.6	30.6	28.7	26.8	24.9
67.5°	37.4	34.5	32.6	30.6	28.7	27.8	25.9	23.9	22.0	20.1	19.2
70°	29.7	27.8	25.9	23.0	22.0	21.1	19.2	17.2	16.3	14.4	13.4
72.5°	23.0	21.1	19.2	17.2	16.3	15.3	14.4	12.5	11.5	10.5	9.6
75°	18.2	16.3	14.4	12.5	12.5	11.5	10.5	8.6	7.7	6.7	6.7
77.5°	12.5	11.5	10.5	8.6	8.6	7.7	6.7	5.7	5.7	4.8	3.8
80°	8.6	7.7	6.7	5.7	4.8	4.8	3.8	3.8	2.9	2.9	1.9
82.5°	5.7	4.8	3.8	2.9	2.9	2.9	1.9	1.9	1.9	1.0	1.0
85°	2.9	1.9	1.9	1.0	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°	505.7	505.7	505.7	505.7	505.7	505.7	505.7	505.7	505.7	505.7	505.7
2.5°	501.8	500.9	499.9	499.9	499.9	499.0	498.0	497.0	497.0	496.1	496.1
5°	494.2	492.3	491.3	490.3	490.3	488.4	487.5	486.5	485.6	484.6	483.6
7.5°	482.7	480.8	478.9	476.9	476.9	475.0	473.1	472.1	470.2	469.3	468.3
10°	468.3	466.4	463.5	461.6	459.7	458.7	455.9	454.0	453.0	450.1	449.2
12.5°	450.1	447.2	444.4	442.5	441.5	438.6	435.8	434.8	431.9	430.0	429.1
15°	431.0	427.1	423.3	422.3	420.4	417.6	414.7	411.8	409.9	407.0	407.0
17.5°	408.9	404.2	401.3	398.4	397.4	393.6	389.8	387.9	385.0	383.1	382.1
20°	385.0	380.2	376.4	374.5	371.6	368.7	364.9	363.0	360.1	358.2	357.2
22.5°	359.1	353.4	349.6	347.6	345.7	340.9	338.1	336.2	333.3	331.4	330.4
25°	332.3	328.5	323.7	320.8	318.9	314.1	311.3	309.3	307.4	305.5	304.6
27.5°	305.5	299.8	295.0	293.1	291.1	288.3	283.5	280.6	279.7	278.7	277.7
30°	278.7	273.9	269.1	266.2	263.4	260.5	257.6	254.7	253.8	251.9	250.0
32.5°	253.8	249.0	244.2	242.3	240.4	235.6	232.7	230.8	229.8	226.0	225.1
35°	227.9	224.1	221.2	219.3	218.4	214.5	212.6	207.8	205.9	204.0	203.0
37.5°	201.1	197.3	194.4	194.4	192.5	190.6	188.7	186.8	182.9	182.0	181.0
40°	175.3	172.4	170.5	168.6	168.6	167.6	165.7	165.7	162.8	160.9	158.0
42.5°	151.3	149.4	147.5	147.5	146.5	145.6	143.7	143.7	141.7	139.8	137.0
45°	129.3	126.4	125.5	125.5	124.5	123.5	122.6	122.6	120.7	118.8	116.8
47.5°	109.2	107.3	106.3	105.3	104.4	104.4	103.4	102.5	101.5	99.6	97.7
50°	91.9	90.0	89.1	88.1	88.1	87.2	86.2	84.3	84.3	81.4	79.5
52.5°	76.6	75.7	73.7	72.8	71.8	70.9	69.9	69.0	67.0	65.1	64.2
55°	62.3	60.3	59.4	58.4	57.5	56.5	55.5	54.6	53.6	50.8	48.8
57.5°	49.8	47.9	46.9	46.9	46.0	44.1	43.1	42.1	40.2	38.3	35.4
60°	39.3	38.3	36.4	36.4	35.4	33.5	32.6	30.6	28.7	25.9	23.9
62.5°	30.6	29.7	27.8	26.8	26.8	24.9	23.0	21.1	19.2	17.2	14.4
65°	23.0	22.0	21.1	20.1	19.2	17.2	15.3	13.4	11.5	8.6	5.7
67.5°	17.2	16.3	14.4	14.4	13.4	11.5	9.6	7.7	4.8	2.9	1.0
70°	12.5	11.5	9.6	8.6	8.6	6.7	4.8	2.9	0.0	0.0	0.0
72.5°	8.6	7.7	5.7	4.8	4.8	2.9	1.0	0.0	0.0	0.0	0.0
75°	5.7	4.8	2.9	2.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	2.9	1.9	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	1.0	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	0.0	0.0	0.0	1.0	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):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	505.7	505.7	505.7	505.7	505.7	505.7	505.7	505.7
2.5°	496.1	495.1	495.1	495.1	494.2	495.1	495.1	495.1
5°	482.7	482.7	481.7	481.7	481.7	480.8	480.8	480.8
7.5°	466.4	466.4	465.4	465.4	465.4	464.5	463.5	463.5
10°	448.2	448.2	447.2	447.2	447.2	446.3	445.3	445.3
12.5°	427.1	427.1	427.1	426.2	426.2	426.2	425.2	426.2
15°	406.1	405.1	405.1	404.2	403.2	403.2	403.2	403.2
17.5°	381.2	380.2	380.2	379.3	380.2	379.3	379.3	379.3
20°	355.3	355.3	355.3	355.3	355.3	355.3	356.3	356.3
22.5°	330.4	329.5	330.4	329.5	329.5	330.4	330.4	331.4
25°	304.6	303.6	303.6	304.6	304.6	304.6	305.5	305.5
27.5°	275.8	277.7	277.7	278.7	278.7	279.7	280.6	279.7
30°	250.9	250.9	250.9	251.9	252.8	253.8	254.7	254.7
32.5°	224.1	225.1	226.0	225.1	226.0	227.9	229.8	230.8
35°	202.1	200.2	199.2	199.2	200.2	201.1	202.1	203.0
37.5°	178.1	177.2	176.2	174.3	175.3	176.2	176.2	176.2
40°	156.1	154.2	153.2	152.3	151.3	150.4	150.4	150.4
42.5°	135.0	133.1	131.2	131.2	128.3	127.4	127.4	126.4
45°	114.9	113.0	111.1	111.1	108.2	105.3	104.4	104.4
47.5°	95.8	92.9	91.9	91.0	88.1	85.2	83.3	82.4
50°	77.6	74.7	73.7	72.8	69.9	66.1	64.2	63.2
52.5°	61.3	58.4	56.5	55.5	51.7	48.8	46.9	46.0
55°	46.0	44.1	42.1	41.2	37.4	33.5	30.6	30.6
57.5°	33.5	29.7	28.7	27.8	23.9	21.1	18.2	17.2
60°	22.0	18.2	17.2	16.3	12.5	9.6	8.6	7.7
62.5°	11.5	8.6	7.7	6.7	4.8	2.9	1.9	1.9
65°	3.8	1.0	1.0	0.0	0.0	0.0	0.0	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)