

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: P238374

Luminaire Tested: **PRS615D010-S6M12-61SWWMB**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238374  
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: PRS615D010-S6M12-61SWWMB  
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 / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 897.4 lumens  
Efficiency: N/A  
Efficacy: 71.2 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

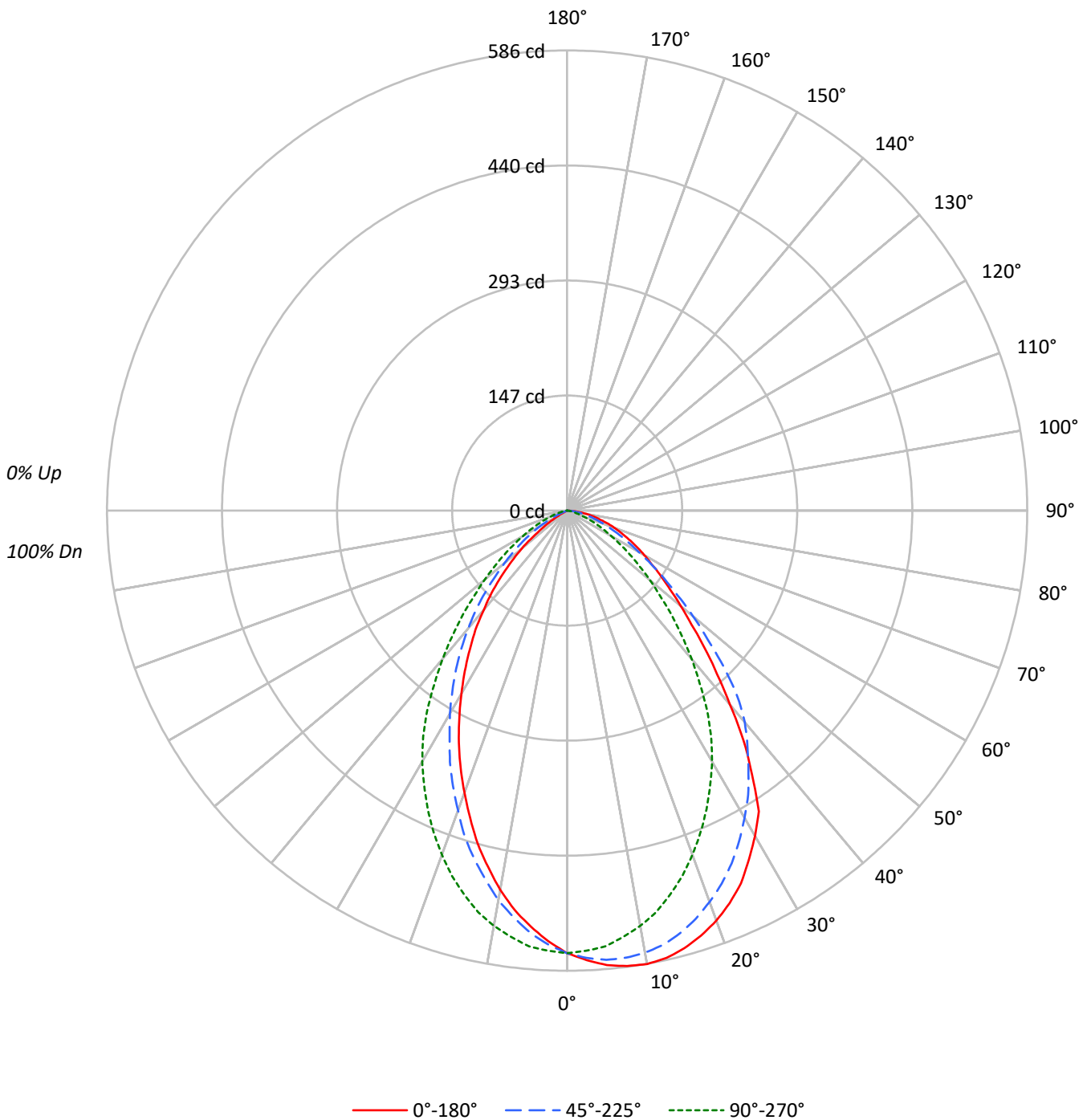
Input Watts (W): 12.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	90°	180°
0°	24266	24266	24266
5°	25111	24074	22980
10°	25633	23478	21440
15°	25719	22568	19599
20°	25457	21370	17521
25°	24879	19939	15511
30°	23784	18350	13384
35°	21571	16320	11348
40°	18126	13855	9285
45°	15089	11441	7222
50°	12673	9190	5091
55°	11005	7304	2702
60°	9756	5623	689
65°	8823	4208	0
70°	8057	2858	0
75°	7087	1780	0
80°	6273	992	0
85°	4594	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.5	5.9
10°-20°	142.4	15.9
20°-30°	194.0	21.6
30°-40°	198.0	22.1
40°-50°	153.1	17.1
50°-60°	92.5	10.3
60°-70°	44.3	4.9
70°-80°	17.2	1.9
80°-90°	3.4	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°	388.9	43.3
0°-40°	586.9	65.4
0°-60°	832.5	92.8
0°-90°	897.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	897.4	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	564	564	564	564	564	
5°	581	574	557	540	532	56
15°	577	557	506	458	440	162
25°	524	496	420	353	326	240
35°	410	402	310	246	216	255
45°	248	282	188	148	119	192
55°	147	151	97	69	36	132
65°	87	73	41	16	0	86
75°	43	31	11	0	0	46
85°	9	5	0	0	0	11
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°	563.6	563.6	563.6	563.6	563.6	563.6	563.6	563.6	563.6	563.6	563.6
2.5°	573.0	573.0	573.0	573.0	573.0	573.0	573.0	571.6	571.6	570.3	570.3
5°	581.0	581.0	581.0	579.6	579.6	578.3	578.3	577.0	577.0	574.3	574.3
7.5°	585.0	585.0	585.0	583.6	583.6	582.3	582.3	581.0	578.3	577.0	574.3
10°	586.3	586.3	585.0	585.0	582.3	582.3	582.3	579.6	577.0	574.3	571.6
12.5°	583.6	582.3	582.3	581.0	579.6	578.3	577.0	575.6	573.0	569.0	566.3
15°	577.0	577.0	577.0	575.6	573.0	571.6	571.6	569.0	565.0	561.0	557.0
17.5°	567.6	567.6	567.6	566.3	563.6	562.3	561.0	558.3	554.3	550.3	545.0
20°	555.6	555.6	554.3	553.0	550.3	550.3	549.0	545.0	541.0	535.7	530.3
22.5°	541.0	541.0	539.7	538.3	535.7	534.3	533.0	529.0	525.0	519.7	514.3
25°	523.7	522.3	521.0	519.7	518.3	515.7	514.3	511.7	507.7	501.0	495.7
27.5°	501.0	501.0	499.7	498.3	497.0	495.7	494.3	490.4	486.4	479.7	474.4
30°	478.4	478.4	477.0	475.7	474.4	473.0	470.4	466.4	463.7	458.4	451.7
32.5°	454.4	453.0	453.0	453.0	450.4	450.4	447.7	443.7	438.4	434.4	429.1
35°	410.4	411.7	413.1	417.1	418.4	421.1	421.1	419.7	414.4	409.1	402.4
37.5°	369.1	366.4	370.4	373.1	378.4	381.1	382.4	387.8	390.4	383.8	377.1
40°	322.5	325.1	327.8	331.8	337.1	338.4	342.4	346.4	353.1	355.8	351.8
42.5°	282.5	282.5	286.5	290.5	294.5	298.5	302.5	307.8	315.8	319.8	321.1
45°	247.8	246.5	247.8	253.2	258.5	261.2	263.8	270.5	278.5	283.8	282.5
47.5°	214.5	215.9	218.5	221.2	223.9	226.5	229.2	237.2	242.5	243.8	242.5
50°	189.2	187.9	190.5	191.9	195.9	197.2	199.9	203.9	207.9	209.2	209.2
52.5°	165.2	166.6	166.6	167.9	170.6	171.9	173.2	177.2	177.2	178.6	177.2
55°	146.6	145.2	146.6	147.9	149.2	150.6	151.9	151.9	151.9	151.9	150.6
57.5°	127.9	127.9	129.3	129.3	130.6	131.9	131.9	130.6	130.6	127.9	126.6
60°	113.3	113.3	113.3	113.3	114.6	114.6	114.6	111.9	109.3	109.3	105.3
62.5°	99.9	98.6	99.9	99.9	99.9	98.6	97.3	94.6	93.3	90.6	87.9
65°	86.6	86.6	86.6	86.6	85.3	85.3	83.9	81.3	78.6	77.3	73.3
67.5°	74.6	74.6	74.6	74.6	73.3	72.0	70.6	68.0	65.3	64.0	60.0
70°	64.0	62.6	62.6	62.6	61.3	60.0	58.6	57.3	54.6	52.0	49.3
72.5°	53.3	53.3	52.0	52.0	50.6	49.3	48.0	46.6	44.0	41.3	38.6
75°	42.6	42.6	42.6	41.3	40.0	40.0	38.6	36.0	34.6	32.0	30.6
77.5°	34.6	33.3	33.3	32.0	30.6	30.6	29.3	28.0	26.6	25.3	22.7
80°	25.3	25.3	25.3	24.0	22.7	22.7	21.3	20.0	18.7	17.3	16.0
82.5°	17.3	17.3	17.3	16.0	16.0	14.7	14.7	13.3	13.3	12.0	10.7
85°	9.3	9.3	9.3	9.3	9.3	8.0	8.0	8.0	6.7	6.7	5.3
87.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	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°	563.6	563.6	563.6	563.6	563.6	563.6	563.6	563.6	563.6	563.6	563.6
2.5°	569.0	569.0	567.6	566.3	566.3	565.0	563.6	563.6	562.3	561.0	559.6
5°	571.6	570.3	567.6	566.3	565.0	565.0	562.3	559.6	558.3	557.0	554.3
7.5°	571.6	569.0	566.3	563.6	562.3	561.0	557.0	554.3	551.6	547.6	545.0
10°	569.0	565.0	561.0	557.0	555.6	553.0	549.0	546.3	541.0	537.0	533.0
12.5°	562.3	558.3	553.0	547.6	545.0	542.3	537.0	533.0	527.7	523.7	518.3
15°	553.0	547.6	542.3	537.0	533.0	531.7	525.0	518.3	513.0	506.3	499.7
17.5°	539.7	534.3	527.7	522.3	518.3	515.7	507.7	501.0	494.3	487.7	481.0
20°	525.0	518.3	511.7	503.7	501.0	497.0	489.0	481.0	473.0	466.4	458.4
22.5°	507.7	501.0	493.0	486.4	481.0	477.0	469.0	459.7	451.7	443.7	435.7
25°	487.7	481.0	473.0	465.0	459.7	455.7	446.4	437.1	429.1	419.7	411.7
27.5°	467.7	459.7	451.7	441.0	437.1	431.7	422.4	413.1	403.7	394.4	385.1
30°	445.0	435.7	427.7	417.1	413.1	407.7	397.1	387.8	378.4	369.1	358.4
32.5°	421.1	411.7	402.4	393.1	387.8	382.4	373.1	362.4	350.4	341.1	333.1
35°	394.4	386.4	377.1	366.4	359.8	354.4	341.1	330.5	318.5	310.5	301.1
37.5°	370.4	359.8	347.8	334.5	327.8	321.1	307.8	297.1	287.8	277.2	269.2
40°	341.1	329.1	315.8	299.8	295.8	289.1	277.2	265.2	255.8	246.5	238.5
42.5°	309.1	295.8	283.8	270.5	263.8	257.2	245.2	233.2	223.9	215.9	207.9
45°	277.2	265.2	251.8	238.5	231.9	226.5	214.5	203.9	195.9	187.9	181.2
47.5°	241.2	233.2	221.2	209.2	201.2	195.9	186.5	177.2	167.9	159.9	155.9
50°	206.5	201.2	191.9	179.9	174.6	169.2	158.6	150.6	143.9	137.2	131.9
52.5°	174.6	170.6	163.9	153.2	149.2	142.6	134.6	127.9	121.3	115.9	111.9
55°	147.9	142.6	137.2	130.6	125.3	122.6	113.3	107.9	102.6	97.3	93.3
57.5°	122.6	119.9	114.6	109.3	105.3	101.3	94.6	89.3	85.3	79.9	77.3
60°	103.9	98.6	94.6	89.3	86.6	83.9	78.6	73.3	69.3	65.3	62.6
62.5°	85.3	81.3	77.3	72.0	70.6	68.0	64.0	58.6	56.0	52.0	49.3
65°	70.6	66.6	64.0	58.6	57.3	54.6	50.6	46.6	44.0	41.3	38.6
67.5°	57.3	54.6	50.6	46.6	45.3	42.6	38.6	36.0	33.3	30.6	29.3
70°	46.6	44.0	40.0	36.0	34.6	33.3	29.3	28.0	25.3	22.7	21.3
72.5°	37.3	34.6	30.6	28.0	26.6	25.3	22.7	20.0	18.7	16.0	14.7
75°	28.0	25.3	22.7	20.0	18.7	18.7	16.0	14.7	13.3	10.7	9.3
77.5°	21.3	18.7	16.0	14.7	13.3	12.0	10.7	9.3	8.0	6.7	5.3
80°	14.7	13.3	10.7	9.3	9.3	8.0	6.7	6.7	5.3	4.0	2.7
82.5°	9.3	8.0	6.7	5.3	5.3	5.3	4.0	2.7	2.7	2.7	1.3
85°	4.0	4.0	2.7	2.7	2.7	2.7	1.3	1.3	1.3	0.0	0.0
87.5°	1.3	1.3	0.0	1.3	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°	563.6	563.6	563.6	563.6	563.6	563.6	563.6	563.6	563.6	563.6	563.6
2.5°	559.6	558.3	557.0	557.0	555.6	555.6	554.3	554.3	553.0	553.0	551.6
5°	551.6	550.3	547.6	547.6	546.3	545.0	542.3	541.0	539.7	538.3	537.0
7.5°	542.3	538.3	535.7	534.3	533.0	530.3	527.7	525.0	522.3	521.0	518.3
10°	527.7	523.7	521.0	519.7	517.0	513.0	510.3	506.3	503.7	501.0	498.3
12.5°	513.0	507.7	502.3	501.0	498.3	493.0	490.4	485.0	481.0	478.4	475.7
15°	494.3	489.0	482.4	479.7	478.4	471.7	467.7	463.7	458.4	454.4	451.7
17.5°	473.0	467.7	461.0	457.0	454.4	449.0	442.4	438.4	434.4	427.7	425.1
20°	451.7	443.7	437.1	434.4	430.4	423.7	418.4	413.1	406.4	402.4	397.1
22.5°	426.4	419.7	411.7	407.7	405.1	397.1	391.7	385.1	379.8	375.8	369.1
25°	403.7	394.4	386.4	382.4	378.4	371.8	363.8	358.4	353.1	347.8	342.4
27.5°	377.1	367.8	359.8	357.1	353.1	343.8	338.4	330.5	323.8	319.8	314.5
30°	350.4	341.1	333.1	329.1	325.1	317.1	310.5	303.8	298.5	293.1	287.8
32.5°	323.8	315.8	307.8	303.8	299.8	291.8	285.1	277.2	271.8	265.2	259.8
35°	293.1	285.1	278.5	274.5	271.8	265.2	258.5	251.8	246.5	239.8	234.5
37.5°	261.2	253.2	249.2	245.2	242.5	237.2	231.9	226.5	221.2	215.9	209.2
40°	230.5	226.5	218.5	217.2	214.5	209.2	205.2	199.9	195.9	190.5	185.2
42.5°	202.5	195.9	190.5	189.2	186.5	182.5	178.6	174.6	171.9	166.6	162.6
45°	175.9	170.6	165.2	162.6	161.2	157.2	153.2	150.6	147.9	143.9	139.9
47.5°	150.6	145.2	141.2	139.9	137.2	134.6	130.6	127.9	123.9	121.3	117.3
50°	127.9	123.9	119.9	118.6	115.9	114.6	110.6	107.9	103.9	99.9	97.3
52.5°	107.9	103.9	101.3	99.9	98.6	94.6	91.9	89.3	85.3	82.6	78.6
55°	89.3	86.6	83.9	82.6	81.3	78.6	76.0	72.0	69.3	65.3	61.3
57.5°	73.3	70.6	68.0	66.6	65.3	62.6	60.0	57.3	53.3	49.3	45.3
60°	58.6	57.3	54.6	53.3	52.0	49.3	46.6	42.6	40.0	34.6	32.0
62.5°	46.6	45.3	42.6	41.3	40.0	36.0	33.3	30.6	26.6	22.7	18.7
65°	36.0	33.3	30.6	30.6	29.3	26.6	22.7	18.7	16.0	12.0	8.0
67.5°	26.6	24.0	21.3	21.3	20.0	17.3	13.3	10.7	6.7	4.0	0.0
70°	18.7	17.3	14.7	13.3	12.0	9.3	6.7	4.0	1.3	0.0	0.0
72.5°	13.3	10.7	9.3	8.0	6.7	4.0	1.3	0.0	0.0	0.0	0.0
75°	8.0	6.7	4.0	4.0	2.7	1.3	0.0	0.0	0.0	0.0	0.0
77.5°	4.0	4.0	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	2.7	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°	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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**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	563.6	563.6	563.6	563.6	563.6	563.6	563.6	563.6
2.5°	551.6	550.3	550.3	550.3	550.3	550.3	549.0	549.0
5°	535.7	534.3	534.3	533.0	533.0	533.0	531.7	531.7
7.5°	517.0	515.7	514.3	514.3	513.0	513.0	511.7	513.0
10°	495.7	493.0	493.0	493.0	491.7	490.4	490.4	490.4
12.5°	473.0	470.4	469.0	467.7	466.4	466.4	465.0	465.0
15°	447.7	445.0	443.7	442.4	441.0	439.7	438.4	439.7
17.5°	421.1	418.4	417.1	415.7	413.1	413.1	411.7	410.4
20°	393.1	390.4	389.1	387.8	386.4	385.1	383.8	382.4
22.5°	365.1	363.8	359.8	359.8	357.1	355.8	354.4	354.4
25°	337.1	334.5	333.1	330.5	327.8	326.5	326.5	326.5
27.5°	309.1	306.5	303.8	302.5	301.1	299.8	297.1	297.1
30°	282.5	278.5	275.8	275.8	273.2	270.5	270.5	269.2
32.5°	255.8	251.8	249.2	247.8	246.5	243.8	242.5	242.5
35°	229.2	225.2	223.9	221.2	218.5	218.5	214.5	215.9
37.5°	205.2	199.9	198.5	197.2	193.2	191.9	190.5	191.9
40°	179.9	175.9	173.2	171.9	169.2	166.6	165.2	165.2
42.5°	155.9	153.2	150.6	149.2	145.2	142.6	141.2	142.6
45°	134.6	130.6	129.3	126.6	122.6	119.9	118.6	118.6
47.5°	113.3	110.6	106.6	105.3	101.3	98.6	95.9	95.9
50°	93.3	89.3	86.6	83.9	81.3	77.3	74.6	76.0
52.5°	74.6	69.3	68.0	65.3	61.3	57.3	54.6	54.6
55°	57.3	53.3	50.6	49.3	44.0	40.0	37.3	36.0
57.5°	41.3	37.3	36.0	33.3	29.3	25.3	21.3	21.3
60°	28.0	24.0	21.3	20.0	16.0	13.3	9.3	8.0
62.5°	14.7	12.0	9.3	8.0	5.3	2.7	2.7	1.3
65°	4.0	1.3	1.3	1.3	1.3	1.3	1.3	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)