

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: P238369

Luminaire Tested: **PRS615D010-S6M12-61SWWMB-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P238369
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-3000K
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 / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 859.1 lumens
Efficiency: N/A
Efficacy: 68.2 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

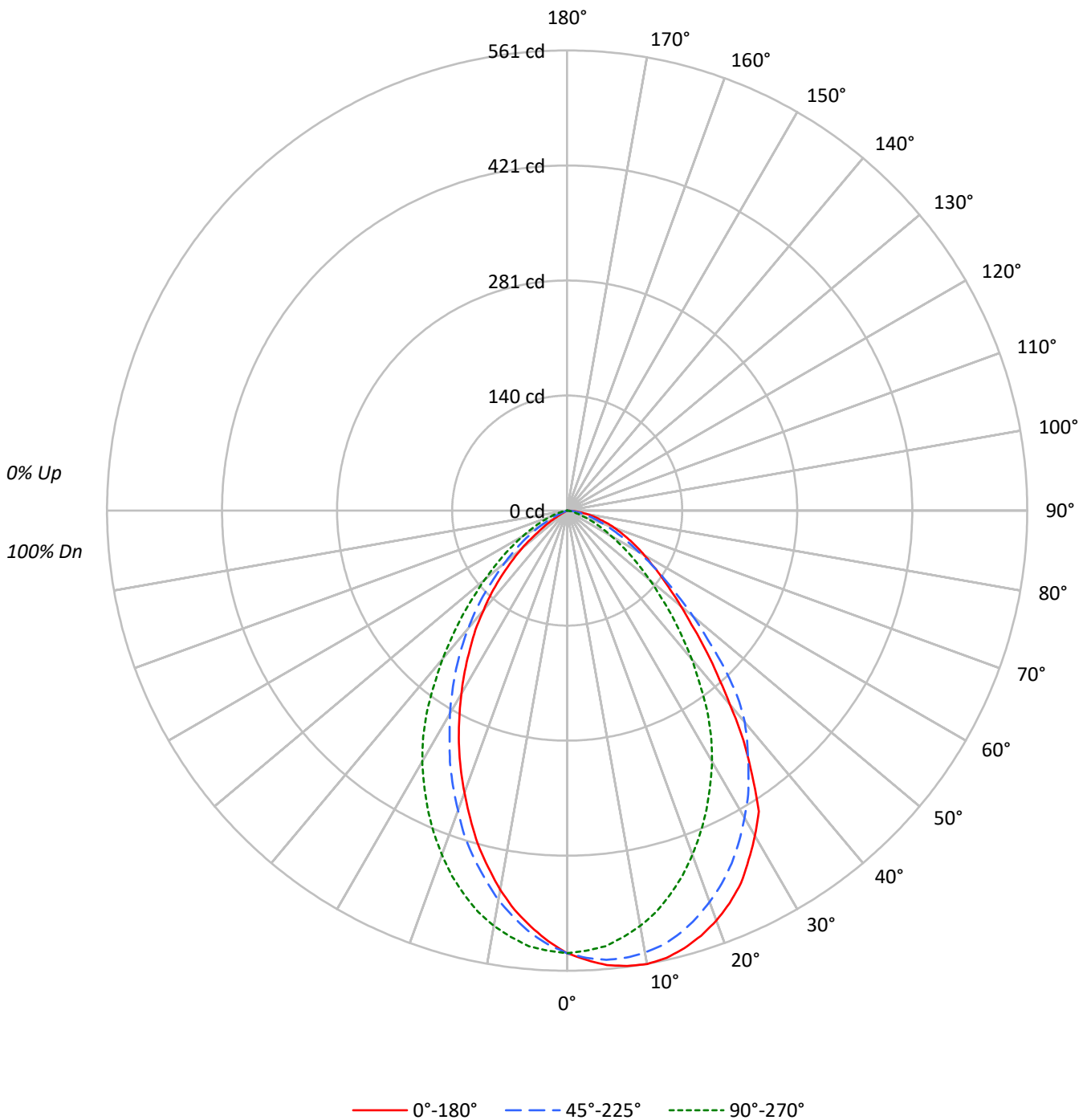
Input Watts (W): 12.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	23233	23233	23233
5°	24039	23045	21999
10°	24540	22476	20522
15°	24618	21605	18766
20°	24371	20458	16774
25°	23815	19088	14846
30°	22765	17565	12812
35°	20651	15621	10859
40°	17351	13264	8892
45°	14449	10954	6911
50°	12131	8802	4870
55°	10532	6989	2582
60°	9334	5382	663
65°	8446	4024	0
70°	7704	2732	0
75°	6787	1697	0
80°	6000	942	0
85°	4397	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.3	5.9
10°-20°	136.3	15.9
20°-30°	185.7	21.6
30°-40°	189.6	22.1
40°-50°	146.5	17.1
50°-60°	88.5	10.3
60°-70°	42.4	4.9
70°-80°	16.4	1.9
80°-90°	3.3	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°	372.3	43.3
0°-40°	561.9	65.4
0°-60°	797.0	92.8
0°-90°	859.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	859.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	540	540	540	540	540	
5°	556	550	533	517	509	53
15°	552	533	485	439	421	156
25°	501	474	402	338	312	230
35°	393	385	297	236	207	244
45°	237	270	180	142	114	184
55°	140	144	93	66	34	126
65°	83	70	40	15	0	83
75°	41	29	10	0	0	44
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°	539.6	539.6	539.6	539.6	539.6	539.6	539.6	539.6	539.6	539.6	539.6
2.5°	548.5	548.5	548.5	548.5	548.5	548.5	548.5	547.2	547.2	546.0	546.0
5°	556.2	556.2	556.2	554.9	554.9	553.6	553.6	552.3	552.3	549.8	549.8
7.5°	560.0	560.0	560.0	558.7	558.7	557.4	557.4	556.2	553.6	552.3	549.8
10°	561.3	561.3	560.0	560.0	557.4	557.4	557.4	554.9	552.3	549.8	547.2
12.5°	558.7	557.4	557.4	556.2	554.9	553.6	552.3	551.1	548.5	544.7	542.1
15°	552.3	552.3	552.3	551.1	548.5	547.2	547.2	544.7	540.9	537.0	533.2
17.5°	543.4	543.4	543.4	542.1	539.6	538.3	537.0	534.5	530.7	526.8	521.7
20°	531.9	531.9	530.7	529.4	526.8	526.8	525.6	521.7	517.9	512.8	507.7
22.5°	517.9	517.9	516.6	515.3	512.8	511.5	510.2	506.4	502.6	497.5	492.4
25°	501.3	500.0	498.8	497.5	496.2	493.7	492.4	489.8	486.0	479.6	474.5
27.5°	479.6	479.6	478.4	477.1	475.8	474.5	473.3	469.4	465.6	459.2	454.1
30°	457.9	457.9	456.7	455.4	454.1	452.8	450.3	446.5	443.9	438.8	432.4
32.5°	435.0	433.7	433.7	433.7	431.2	431.2	428.6	424.8	419.7	415.9	410.7
35°	392.9	394.2	395.4	399.3	400.5	403.1	403.1	401.8	396.7	391.6	385.2
37.5°	353.3	350.8	354.6	357.2	362.3	364.8	366.1	371.2	373.8	367.4	361.0
40°	308.7	311.2	313.8	317.6	322.7	324.0	327.8	331.7	338.0	340.6	336.8
42.5°	270.4	270.4	274.3	278.1	281.9	285.7	289.6	294.7	302.3	306.1	307.4
45°	237.3	236.0	237.3	242.4	247.5	250.0	252.6	258.9	266.6	271.7	270.4
47.5°	205.4	206.6	209.2	211.8	214.3	216.9	219.4	227.1	232.2	233.4	232.2
50°	181.1	179.9	182.4	183.7	187.5	188.8	191.3	195.2	199.0	200.3	200.3
52.5°	158.2	159.5	159.5	160.7	163.3	164.6	165.8	169.7	169.7	170.9	169.7
55°	140.3	139.0	140.3	141.6	142.9	144.1	145.4	145.4	145.4	145.4	144.1
57.5°	122.5	122.5	123.7	123.7	125.0	126.3	126.3	125.0	125.0	122.5	121.2
60°	108.4	108.4	108.4	108.4	109.7	109.7	109.7	107.2	104.6	104.6	100.8
62.5°	95.7	94.4	95.7	95.7	95.7	94.4	93.1	90.6	89.3	86.7	84.2
65°	82.9	82.9	82.9	82.9	81.6	81.6	80.4	77.8	75.3	74.0	70.2
67.5°	71.4	71.4	71.4	71.4	70.2	68.9	67.6	65.1	62.5	61.2	57.4
70°	61.2	60.0	60.0	60.0	58.7	57.4	56.1	54.9	52.3	49.7	47.2
72.5°	51.0	51.0	49.7	49.7	48.5	47.2	45.9	44.6	42.1	39.5	37.0
75°	40.8	40.8	40.8	39.5	38.3	38.3	37.0	34.4	33.2	30.6	29.3
77.5°	33.2	31.9	31.9	30.6	29.3	29.3	28.1	26.8	25.5	24.2	21.7
80°	24.2	24.2	24.2	23.0	21.7	21.7	20.4	19.1	17.9	16.6	15.3
82.5°	16.6	16.6	16.6	15.3	15.3	14.0	14.0	12.8	12.8	11.5	10.2
85°	8.9	8.9	8.9	8.9	8.9	7.7	7.7	7.7	6.4	6.4	5.1
87.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	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°	539.6	539.6	539.6	539.6	539.6	539.6	539.6	539.6	539.6	539.6	539.6
2.5°	544.7	544.7	543.4	542.1	542.1	540.9	539.6	539.6	538.3	537.0	535.8
5°	547.2	546.0	543.4	542.1	540.9	540.9	538.3	535.8	534.5	533.2	530.7
7.5°	547.2	544.7	542.1	539.6	538.3	537.0	533.2	530.7	528.1	524.3	521.7
10°	544.7	540.9	537.0	533.2	531.9	529.4	525.6	523.0	517.9	514.1	510.2
12.5°	538.3	534.5	529.4	524.3	521.7	519.2	514.1	510.2	505.1	501.3	496.2
15°	529.4	524.3	519.2	514.1	510.2	509.0	502.6	496.2	491.1	484.7	478.4
17.5°	516.6	511.5	505.1	500.0	496.2	493.7	486.0	479.6	473.3	466.9	460.5
20°	502.6	496.2	489.8	482.2	479.6	475.8	468.2	460.5	452.8	446.5	438.8
22.5°	486.0	479.6	472.0	465.6	460.5	456.7	449.0	440.1	432.4	424.8	417.1
25°	466.9	460.5	452.8	445.2	440.1	436.3	427.3	418.4	410.7	401.8	394.2
27.5°	447.7	440.1	432.4	422.2	418.4	413.3	404.4	395.4	386.5	377.6	368.7
30°	426.1	417.1	409.5	399.3	395.4	390.3	380.1	371.2	362.3	353.3	343.1
32.5°	403.1	394.2	385.2	376.3	371.2	366.1	357.2	347.0	335.5	326.6	318.9
35°	377.6	369.9	361.0	350.8	344.4	339.3	326.6	316.4	304.9	297.2	288.3
37.5°	354.6	344.4	332.9	320.2	313.8	307.4	294.7	284.5	275.5	265.3	257.7
40°	326.6	315.1	302.3	287.0	283.2	276.8	265.3	253.8	244.9	236.0	228.3
42.5°	295.9	283.2	271.7	258.9	252.6	246.2	234.7	223.2	214.3	206.6	199.0
45°	265.3	253.8	241.1	228.3	222.0	216.9	205.4	195.2	187.5	179.9	173.5
47.5°	230.9	223.2	211.8	200.3	192.6	187.5	178.6	169.7	160.7	153.1	149.2
50°	197.7	192.6	183.7	172.2	167.1	162.0	151.8	144.1	137.8	131.4	126.3
52.5°	167.1	163.3	156.9	146.7	142.9	136.5	128.8	122.5	116.1	111.0	107.2
55°	141.6	136.5	131.4	125.0	119.9	117.4	108.4	103.3	98.2	93.1	89.3
57.5°	117.4	114.8	109.7	104.6	100.8	96.9	90.6	85.5	81.6	76.5	74.0
60°	99.5	94.4	90.6	85.5	82.9	80.4	75.3	70.2	66.3	62.5	60.0
62.5°	81.6	77.8	74.0	68.9	67.6	65.1	61.2	56.1	53.6	49.7	47.2
65°	67.6	63.8	61.2	56.1	54.9	52.3	48.5	44.6	42.1	39.5	37.0
67.5°	54.9	52.3	48.5	44.6	43.4	40.8	37.0	34.4	31.9	29.3	28.1
70°	44.6	42.1	38.3	34.4	33.2	31.9	28.1	26.8	24.2	21.7	20.4
72.5°	35.7	33.2	29.3	26.8	25.5	24.2	21.7	19.1	17.9	15.3	14.0
75°	26.8	24.2	21.7	19.1	17.9	17.9	15.3	14.0	12.8	10.2	8.9
77.5°	20.4	17.9	15.3	14.0	12.8	11.5	10.2	8.9	7.7	6.4	5.1
80°	14.0	12.8	10.2	8.9	8.9	7.7	6.4	6.4	5.1	3.8	2.6
82.5°	8.9	7.7	6.4	5.1	5.1	5.1	3.8	2.6	2.6	2.6	1.3
85°	3.8	3.8	2.6	2.6	2.6	2.6	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°	539.6	539.6	539.6	539.6	539.6	539.6	539.6	539.6	539.6	539.6	539.6
2.5°	535.8	534.5	533.2	533.2	531.9	531.9	530.7	530.7	529.4	529.4	528.1
5°	528.1	526.8	524.3	524.3	523.0	521.7	519.2	517.9	516.6	515.3	514.1
7.5°	519.2	515.3	512.8	511.5	510.2	507.7	505.1	502.6	500.0	498.8	496.2
10°	505.1	501.3	498.8	497.5	494.9	491.1	488.6	484.7	482.2	479.6	477.1
12.5°	491.1	486.0	480.9	479.6	477.1	472.0	469.4	464.3	460.5	457.9	455.4
15°	473.3	468.2	461.8	459.2	457.9	451.6	447.7	443.9	438.8	435.0	432.4
17.5°	452.8	447.7	441.4	437.5	435.0	429.9	423.5	419.7	415.9	409.5	406.9
20°	432.4	424.8	418.4	415.9	412.0	405.6	400.5	395.4	389.1	385.2	380.1
22.5°	408.2	401.8	394.2	390.3	387.8	380.1	375.0	368.7	363.5	359.7	353.3
25°	386.5	377.6	369.9	366.1	362.3	355.9	348.2	343.1	338.0	332.9	327.8
27.5°	361.0	352.1	344.4	341.9	338.0	329.1	324.0	316.4	310.0	306.1	301.0
30°	335.5	326.6	318.9	315.1	311.2	303.6	297.2	290.8	285.7	280.6	275.5
32.5°	310.0	302.3	294.7	290.8	287.0	279.4	273.0	265.3	260.2	253.8	248.7
35°	280.6	273.0	266.6	262.8	260.2	253.8	247.5	241.1	236.0	229.6	224.5
37.5°	250.0	242.4	238.5	234.7	232.2	227.1	222.0	216.9	211.8	206.6	200.3
40°	220.7	216.9	209.2	207.9	205.4	200.3	196.4	191.3	187.5	182.4	177.3
42.5°	193.9	187.5	182.4	181.1	178.6	174.8	170.9	167.1	164.6	159.5	155.6
45°	168.4	163.3	158.2	155.6	154.3	150.5	146.7	144.1	141.6	137.8	133.9
47.5°	144.1	139.0	135.2	133.9	131.4	128.8	125.0	122.5	118.6	116.1	112.3
50°	122.5	118.6	114.8	113.5	111.0	109.7	105.9	103.3	99.5	95.7	93.1
52.5°	103.3	99.5	96.9	95.7	94.4	90.6	88.0	85.5	81.6	79.1	75.3
55°	85.5	82.9	80.4	79.1	77.8	75.3	72.7	68.9	66.3	62.5	58.7
57.5°	70.2	67.6	65.1	63.8	62.5	60.0	57.4	54.9	51.0	47.2	43.4
60°	56.1	54.9	52.3	51.0	49.7	47.2	44.6	40.8	38.3	33.2	30.6
62.5°	44.6	43.4	40.8	39.5	38.3	34.4	31.9	29.3	25.5	21.7	17.9
65°	34.4	31.9	29.3	29.3	28.1	25.5	21.7	17.9	15.3	11.5	7.7
67.5°	25.5	23.0	20.4	20.4	19.1	16.6	12.8	10.2	6.4	3.8	0.0
70°	17.9	16.6	14.0	12.8	11.5	8.9	6.4	3.8	1.3	0.0	0.0
72.5°	12.8	10.2	8.9	7.7	6.4	3.8	1.3	0.0	0.0	0.0	0.0
75°	7.7	6.4	3.8	3.8	2.6	1.3	0.0	0.0	0.0	0.0	0.0
77.5°	3.8	3.8	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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°	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°	539.6	539.6	539.6	539.6	539.6	539.6	539.6	539.6
2.5°	528.1	526.8	526.8	526.8	526.8	526.8	525.6	525.6
5°	512.8	511.5	511.5	510.2	510.2	510.2	509.0	509.0
7.5°	494.9	493.7	492.4	492.4	491.1	491.1	489.8	491.1
10°	474.5	472.0	472.0	472.0	470.7	469.4	469.4	469.4
12.5°	452.8	450.3	449.0	447.7	446.5	446.5	445.2	445.2
15°	428.6	426.1	424.8	423.5	422.2	421.0	419.7	421.0
17.5°	403.1	400.5	399.3	398.0	395.4	395.4	394.2	392.9
20°	376.3	373.8	372.5	371.2	369.9	368.7	367.4	366.1
22.5°	349.5	348.2	344.4	344.4	341.9	340.6	339.3	339.3
25°	322.7	320.2	318.9	316.4	313.8	312.5	312.5	312.5
27.5°	295.9	293.4	290.8	289.6	288.3	287.0	284.5	284.5
30°	270.4	266.6	264.1	264.1	261.5	258.9	258.9	257.7
32.5°	244.9	241.1	238.5	237.3	236.0	233.4	232.2	232.2
35°	219.4	215.6	214.3	211.8	209.2	209.2	205.4	206.6
37.5°	196.4	191.3	190.1	188.8	185.0	183.7	182.4	183.7
40°	172.2	168.4	165.8	164.6	162.0	159.5	158.2	158.2
42.5°	149.2	146.7	144.1	142.9	139.0	136.5	135.2	136.5
45°	128.8	125.0	123.7	121.2	117.4	114.8	113.5	113.5
47.5°	108.4	105.9	102.0	100.8	96.9	94.4	91.8	91.8
50°	89.3	85.5	82.9	80.4	77.8	74.0	71.4	72.7
52.5°	71.4	66.3	65.1	62.5	58.7	54.9	52.3	52.3
55°	54.9	51.0	48.5	47.2	42.1	38.3	35.7	34.4
57.5°	39.5	35.7	34.4	31.9	28.1	24.2	20.4	20.4
60°	26.8	23.0	20.4	19.1	15.3	12.8	8.9	7.7
62.5°	14.0	11.5	8.9	7.7	5.1	2.6	2.6	1.3
65°	3.8	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)