

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: P238354

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P238354
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-27)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS615D010-S6M12-61SWWMW-3000K
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" WALL WASH DISTRIBUTION, WW TRIM MATTE WHITE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 939.4 lumens
Efficiency: N/A
Efficacy: 74.6 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.04 / 1.14
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

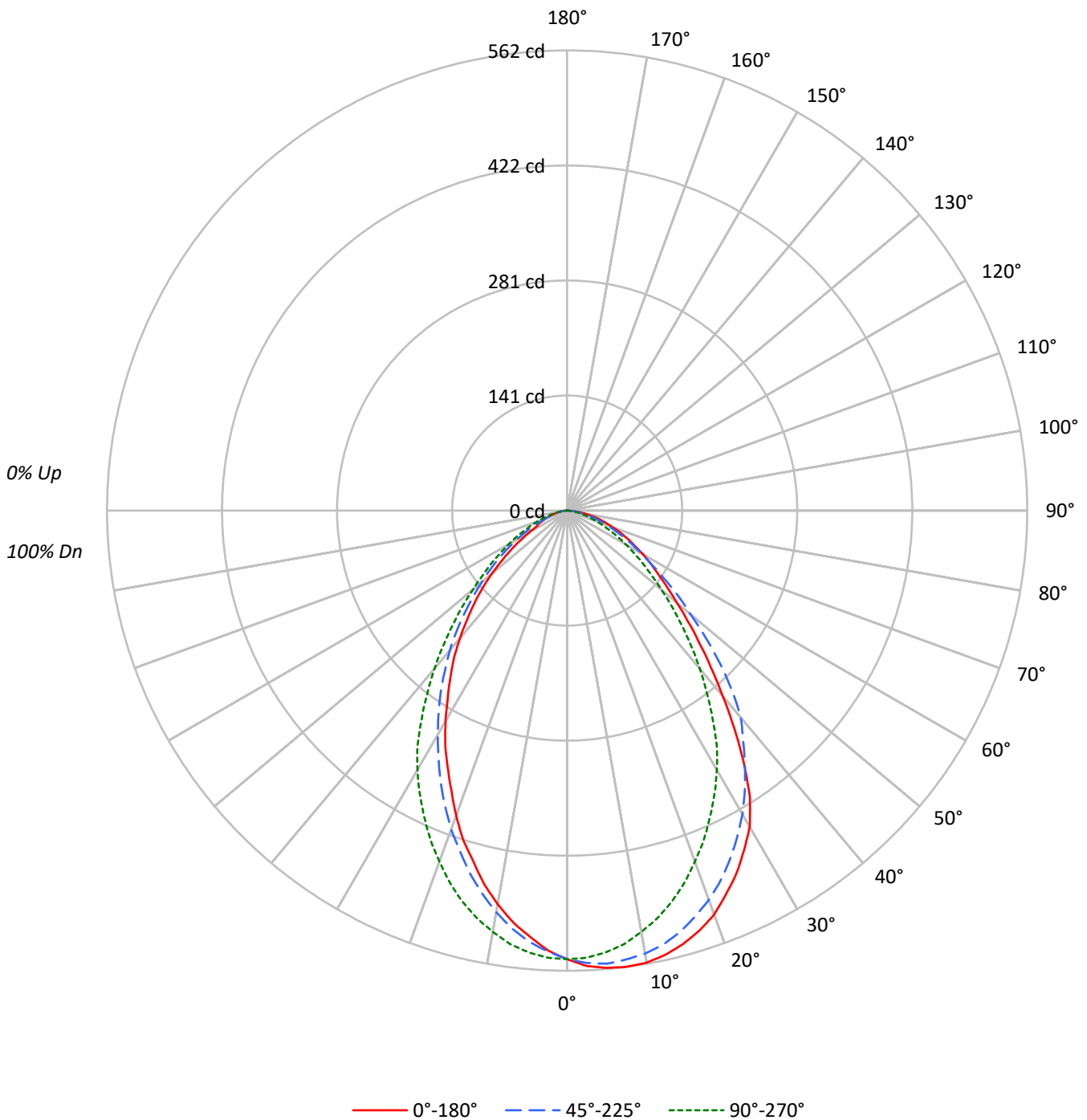
Input Watts (W): 12.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	111	107	104	100	108	105	102	99	101	98	96		97	95	93		93	92	90	88
2	103	96	90	86	100	94	89	85	91	86	83		88	84	81		85	82	79	77
3	95	86	79	74	93	85	78	73	82	76	72		79	75	71		77	73	70	68
4	88	78	70	65	86	77	70	64	74	68	63		72	67	63		70	66	62	60
5	82	71	63	57	80	70	62	57	68	61	56		66	60	56		64	59	55	53
6	76	65	57	51	75	64	56	51	62	56	51		61	55	50		59	54	50	48
7	71	59	52	46	70	59	51	46	57	51	46		56	50	45		55	49	45	43
8	67	55	47	42	66	54	47	42	53	46	42		52	46	41		51	45	41	39
9	63	51	43	38	62	50	43	38	49	43	38		48	42	38		47	42	38	36
10	59	47	40	35	58	47	40	35	46	39	35		45	39	35		44	39	35	33

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	23590	23590	23590
5°	24229	23404	22578
10°	24509	22839	21335
15°	24422	22038	19764
20°	24050	20898	18158
25°	23245	19611	16404
30°	22169	18181	14761
35°	19758	16273	13061
40°	16614	14181	11460
45°	13889	12026	9773
50°	11695	10068	8025
55°	10231	8512	6313
60°	9214	7130	4607
65°	8303	5838	3892
70°	7377	4809	3374
75°	6787	3810	2961
80°	5678	2851	2529
85°	4397	1877	1877



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.1	5.4
10°-20°	139.1	14.8
20°-30°	191.1	20.3
30°-40°	198.0	21.1
40°-50°	159.8	17.0
50°-60°	106.1	11.3
60°-70°	59.9	6.4
70°-80°	27.5	2.9
80°-90°	6.7	0.7
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°	381.4	40.6
0°-40°	579.4	61.7
0°-60°	845.3	90.0
0°-90°	939.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	939.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	548	548	548	548	548	
5°	561	556	542	529	522	53
15°	548	533	494	459	443	154
25°	489	470	413	366	345	225
35°	376	378	310	269	248	233
45°	228	264	198	177	160	177
55°	136	144	113	102	84	123
65°	82	75	57	46	38	81
75°	41	33	23	17	18	43
85°	9	6	4	5	4	10
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°	547.9	547.9	547.9	547.9	547.9	547.9	547.9	547.9	547.9	547.9	547.9
2.5°	556.8	555.5	555.5	555.5	555.5	555.5	555.5	555.5	554.2	554.2	553.0
5°	560.6	560.6	560.6	560.6	559.3	559.3	559.3	558.1	556.8	555.5	555.5
7.5°	561.9	561.9	561.9	560.6	560.6	560.6	559.3	558.1	556.8	555.5	553.0
10°	560.6	560.6	559.3	559.3	558.1	556.8	556.8	555.5	554.2	551.7	549.2
12.5°	555.5	555.5	555.5	554.2	553.0	553.0	551.7	549.2	547.9	545.3	542.8
15°	547.9	547.9	547.9	546.6	545.3	544.1	544.1	541.5	539.0	536.4	532.6
17.5°	537.7	537.7	537.7	536.4	533.9	533.9	532.6	530.0	527.5	524.9	519.8
20°	524.9	523.7	523.7	522.4	519.8	519.8	518.6	516.0	513.5	509.7	505.8
22.5°	507.1	508.4	507.1	505.8	504.6	503.3	502.0	499.5	496.9	493.1	489.3
25°	489.3	488.0	488.0	488.0	486.7	484.2	482.9	481.6	477.8	474.0	470.2
27.5°	467.6	465.1	465.1	466.3	465.1	463.8	462.5	460.0	457.4	453.6	449.8
30°	445.9	444.7	444.7	443.4	440.9	439.6	439.6	437.0	435.8	431.9	428.1
32.5°	415.4	416.6	417.9	419.2	417.9	417.9	417.9	414.1	410.3	407.7	403.9
35°	375.9	377.1	379.7	382.2	387.3	388.6	389.9	391.2	387.3	383.5	378.4
37.5°	335.1	337.6	338.9	342.7	346.6	350.4	351.7	356.8	360.6	359.3	352.9
40°	295.6	296.9	300.7	302.0	308.3	312.2	314.7	319.8	327.5	330.0	330.0
42.5°	259.9	261.2	262.5	266.3	271.4	276.5	277.8	282.9	291.8	295.6	298.1
45°	228.1	229.3	231.9	233.2	238.3	240.8	243.4	251.0	256.1	262.5	263.7
47.5°	200.0	200.0	201.3	205.1	209.0	211.5	212.8	219.2	224.2	228.1	229.3
50°	174.6	175.8	177.1	178.4	180.9	183.5	186.0	191.1	194.9	197.5	196.2
52.5°	154.2	155.4	155.4	156.7	159.3	161.8	163.1	165.6	168.2	169.5	170.7
55°	136.3	136.3	137.6	138.9	140.2	141.4	141.4	144.0	144.0	145.3	144.0
57.5°	121.0	121.0	121.0	122.3	122.3	123.6	123.6	123.6	123.6	123.6	122.3
60°	107.0	105.8	107.0	107.0	108.3	108.3	108.3	107.0	105.8	105.8	104.5
62.5°	93.0	93.0	93.0	94.3	94.3	93.0	93.0	93.0	90.5	90.5	89.2
65°	81.5	80.3	81.5	81.5	81.5	80.3	80.3	79.0	77.7	76.4	75.2
67.5°	70.1	70.1	70.1	70.1	68.8	68.8	68.8	66.3	65.0	63.7	62.4
70°	58.6	59.9	58.6	58.6	58.6	57.3	57.3	56.1	54.8	53.5	52.2
72.5°	49.7	49.7	49.7	48.4	48.4	47.1	47.1	45.9	44.6	43.3	42.0
75°	40.8	40.8	40.8	39.5	38.2	38.2	38.2	36.9	35.7	34.4	33.1
77.5°	31.9	31.9	30.6	30.6	29.3	29.3	29.3	28.0	26.8	25.5	25.5
80°	22.9	22.9	22.9	22.9	21.7	21.7	21.7	20.4	19.1	19.1	17.8
82.5°	15.3	16.6	15.3	15.3	14.0	14.0	14.0	14.0	12.7	12.7	12.7
85°	8.9	8.9	8.9	8.9	7.6	8.9	7.6	7.6	7.6	7.6	6.4
87.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
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°	547.9	547.9	547.9	547.9	547.9	547.9	547.9	547.9	547.9	547.9	547.9
2.5°	553.0	551.7	551.7	550.4	550.4	549.2	549.2	547.9	547.9	546.6	545.3
5°	553.0	551.7	550.4	550.4	549.2	547.9	546.6	545.3	542.8	541.5	540.2
7.5°	551.7	550.4	547.9	545.3	544.1	542.8	541.5	539.0	536.4	533.9	531.3
10°	547.9	545.3	541.5	539.0	537.7	535.1	532.6	530.0	526.2	522.4	519.8
12.5°	540.2	536.4	532.6	528.8	527.5	524.9	521.1	517.3	513.5	509.7	505.8
15°	528.8	524.9	521.1	517.3	514.8	513.5	508.4	503.3	499.5	494.4	489.3
17.5°	516.0	512.2	507.1	502.0	499.5	496.9	493.1	486.7	482.9	476.5	472.7
20°	502.0	496.9	490.5	485.4	482.9	480.3	474.0	468.9	462.5	456.1	452.3
22.5°	484.2	477.8	472.7	467.6	463.8	461.2	454.9	448.5	442.1	435.8	429.4
25°	463.8	458.7	452.3	447.2	443.4	439.6	433.2	426.8	419.2	412.8	406.4
27.5°	444.7	438.3	431.9	424.3	421.7	416.6	410.3	403.9	396.3	389.9	382.2
30°	421.7	415.4	407.7	401.4	398.8	395.0	387.3	379.7	373.3	365.7	359.3
32.5°	398.8	392.4	386.1	378.4	374.6	369.5	361.9	354.2	346.6	340.2	332.5
35°	374.6	368.2	360.6	352.9	347.8	342.7	333.8	324.9	317.3	309.6	305.8
37.5°	349.1	341.5	333.8	322.4	317.3	312.2	303.2	295.6	288.0	280.3	276.5
40°	321.1	312.2	303.2	293.1	288.0	281.6	273.9	266.3	258.6	252.3	247.2
42.5°	293.1	281.6	272.7	261.2	257.4	252.3	244.6	235.7	229.3	224.2	219.2
45°	261.2	253.6	243.4	233.2	228.1	224.2	216.6	209.0	202.6	197.5	193.7
47.5°	228.1	224.2	214.1	203.9	201.3	196.2	188.6	182.2	177.1	173.3	169.5
50°	197.5	194.9	188.6	178.4	174.6	170.7	164.4	159.3	154.2	150.3	147.8
52.5°	169.5	166.9	163.1	155.4	151.6	147.8	142.7	137.6	133.8	130.0	128.7
55°	144.0	141.4	137.6	132.5	130.0	126.1	122.3	118.5	114.7	113.4	110.8
57.5°	122.3	118.5	115.9	112.1	110.8	108.3	104.5	101.9	99.4	96.8	94.3
60°	103.2	100.7	98.1	95.6	94.3	93.0	89.2	86.6	84.1	82.8	80.3
62.5°	87.9	85.4	82.8	80.3	79.0	77.7	75.2	72.6	70.1	70.1	67.5
65°	73.9	71.4	70.1	67.5	66.3	65.0	62.4	61.2	58.6	57.3	56.1
67.5°	61.2	59.9	58.6	54.8	54.8	53.5	51.0	49.7	48.4	47.1	45.9
70°	49.7	48.4	47.1	45.9	44.6	43.3	42.0	40.8	38.2	38.2	36.9
72.5°	40.8	39.5	36.9	35.7	35.7	34.4	33.1	31.9	30.6	29.3	29.3
75°	31.9	30.6	29.3	28.0	26.8	26.8	25.5	24.2	24.2	22.9	21.7
77.5°	24.2	22.9	21.7	20.4	20.4	19.1	19.1	17.8	17.8	16.6	16.6
80°	16.6	16.6	15.3	15.3	14.0	14.0	12.7	12.7	12.7	11.5	11.5
82.5°	11.5	10.2	10.2	10.2	8.9	8.9	8.9	8.9	7.6	7.6	7.6
85°	6.4	6.4	5.1	5.1	5.1	5.1	5.1	5.1	5.1	3.8	3.8
87.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
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°	547.9	547.9	547.9	547.9	547.9	547.9	547.9	547.9	547.9	547.9	547.9
2.5°	545.3	544.1	542.8	542.8	542.8	541.5	541.5	540.2	539.0	539.0	537.7
5°	537.7	536.4	535.1	533.9	533.9	531.3	531.3	530.0	528.8	527.5	526.2
7.5°	528.8	526.2	524.9	522.4	522.4	521.1	517.3	516.0	514.8	512.2	510.9
10°	517.3	513.5	510.9	509.7	507.1	505.8	502.0	500.7	498.2	496.9	494.4
12.5°	502.0	498.2	494.4	493.1	491.8	488.0	485.4	481.6	479.1	476.5	474.0
15°	485.4	481.6	476.5	475.3	474.0	468.9	465.1	462.5	458.7	456.1	453.6
17.5°	466.3	461.2	456.1	454.9	452.3	447.2	444.7	440.9	435.8	433.2	430.7
20°	445.9	440.9	435.8	434.5	431.9	426.8	421.7	417.9	414.1	411.5	407.7
22.5°	423.0	417.9	411.5	409.0	407.7	401.4	397.5	393.7	389.9	384.8	382.2
25°	401.4	395.0	389.9	386.1	383.5	378.4	374.6	368.2	365.7	360.6	358.0
27.5°	377.1	370.8	365.7	361.9	359.3	355.5	349.1	344.0	340.2	336.4	333.8
30°	352.9	346.6	341.5	337.6	335.1	330.0	323.6	321.1	316.0	312.2	308.3
32.5°	327.5	321.1	314.7	313.4	309.6	304.5	300.7	295.6	291.8	288.0	284.1
35°	298.1	294.3	289.2	288.0	285.4	280.3	276.5	272.7	268.8	263.7	259.9
37.5°	270.1	265.0	262.5	259.9	258.6	256.1	252.3	248.5	244.6	240.8	239.5
40°	242.1	238.3	234.4	234.4	233.2	230.6	228.1	225.5	223.0	219.2	216.6
42.5°	215.3	211.5	210.2	207.7	206.4	205.1	202.6	201.3	200.0	197.5	194.9
45°	189.8	187.3	184.7	183.5	182.2	180.9	180.9	178.4	177.1	175.8	173.3
47.5°	165.6	164.4	163.1	161.8	160.5	160.5	158.0	156.7	155.4	155.4	152.9
50°	145.3	144.0	142.7	141.4	140.2	140.2	138.9	137.6	136.3	135.1	132.5
52.5°	127.4	126.1	123.6	123.6	123.6	122.3	121.0	119.8	118.5	117.2	115.9
55°	109.6	108.3	107.0	107.0	105.8	105.8	104.5	103.2	101.9	100.7	99.4
57.5°	94.3	93.0	91.7	91.7	90.5	90.5	89.2	87.9	85.4	84.1	82.8
60°	80.3	79.0	77.7	77.7	76.4	75.2	75.2	72.6	71.4	70.1	67.5
62.5°	66.3	65.0	65.0	63.7	63.7	63.7	62.4	59.9	58.6	56.1	54.8
65°	54.8	53.5	53.5	52.2	52.2	51.0	49.7	48.4	45.9	44.6	42.0
67.5°	44.6	44.6	43.3	42.0	42.0	40.8	39.5	36.9	35.7	33.1	31.9
70°	35.7	34.4	34.4	33.1	31.9	30.6	29.3	28.0	26.8	26.8	26.8
72.5°	28.0	26.8	26.8	25.5	25.5	22.9	21.7	21.7	21.7	21.7	21.7
75°	21.7	20.4	19.1	19.1	17.8	17.8	16.6	16.6	16.6	16.6	17.8
77.5°	15.3	15.3	14.0	14.0	12.7	12.7	12.7	12.7	12.7	12.7	14.0
80°	11.5	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2
82.5°	7.6	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	7.6
85°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	5.1	3.8	3.8
87.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
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°	547.9	547.9	547.9	547.9	547.9	547.9	547.9	547.9
2.5°	537.7	537.7	537.7	537.7	537.7	536.4	537.7	537.7
5°	526.2	524.9	524.9	523.7	523.7	523.7	523.7	522.4
7.5°	509.7	508.4	508.4	508.4	507.1	507.1	505.8	507.1
10°	491.8	490.5	489.3	490.5	488.0	488.0	488.0	488.0
12.5°	472.7	471.4	470.2	468.9	468.9	467.6	467.6	467.6
15°	451.0	449.8	448.5	447.2	447.2	444.7	444.7	443.4
17.5°	428.1	426.8	425.6	424.3	421.7	421.7	420.5	421.7
20°	403.9	401.4	400.1	400.1	398.8	397.5	396.3	396.3
22.5°	379.7	377.1	377.1	374.6	373.3	372.0	370.8	369.5
25°	354.2	351.7	351.7	349.1	347.8	346.6	346.6	345.3
27.5°	330.0	326.2	326.2	324.9	322.4	321.1	321.1	322.4
30°	305.8	303.2	302.0	299.4	298.1	296.9	295.6	296.9
32.5°	281.6	277.8	276.5	276.5	275.2	273.9	272.7	271.4
35°	257.4	256.1	253.6	252.3	249.7	249.7	248.5	248.5
37.5°	235.7	231.9	230.6	229.3	228.1	226.8	225.5	226.8
40°	212.8	210.2	207.7	207.7	205.1	203.9	202.6	203.9
42.5°	192.4	189.8	188.6	186.0	183.5	182.2	182.2	180.9
45°	172.0	168.2	168.2	164.4	163.1	161.8	160.5	160.5
47.5°	151.6	149.1	146.5	146.5	142.7	141.4	140.2	140.2
50°	132.5	128.7	127.4	126.1	123.6	121.0	119.8	119.8
52.5°	113.4	110.8	108.3	108.3	105.8	103.2	101.9	100.7
55°	96.8	94.3	93.0	90.5	89.2	85.4	84.1	84.1
57.5°	80.3	77.7	76.4	75.2	72.6	70.1	67.5	67.5
60°	66.3	63.7	63.7	61.2	58.6	56.1	53.5	53.5
62.5°	52.2	49.7	49.7	48.4	45.9	44.6	43.3	42.0
65°	40.8	38.2	38.2	38.2	38.2	38.2	36.9	38.2
67.5°	31.9	31.9	31.9	31.9	31.9	31.9	31.9	31.9
70°	26.8	26.8	26.8	26.8	26.8	26.8	26.8	26.8
72.5°	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7
75°	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8
77.5°	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
80°	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2
82.5°	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
85°	3.8	5.1	5.1	5.1	5.1	5.1	3.8	3.8
87.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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