

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: P238370

Luminaire Tested: **PRS620D010-S6M12-61SWWMB-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P238370
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: PRS620D010-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: 1400.6 lumens
Efficiency: N/A
Efficacy: 70.0 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

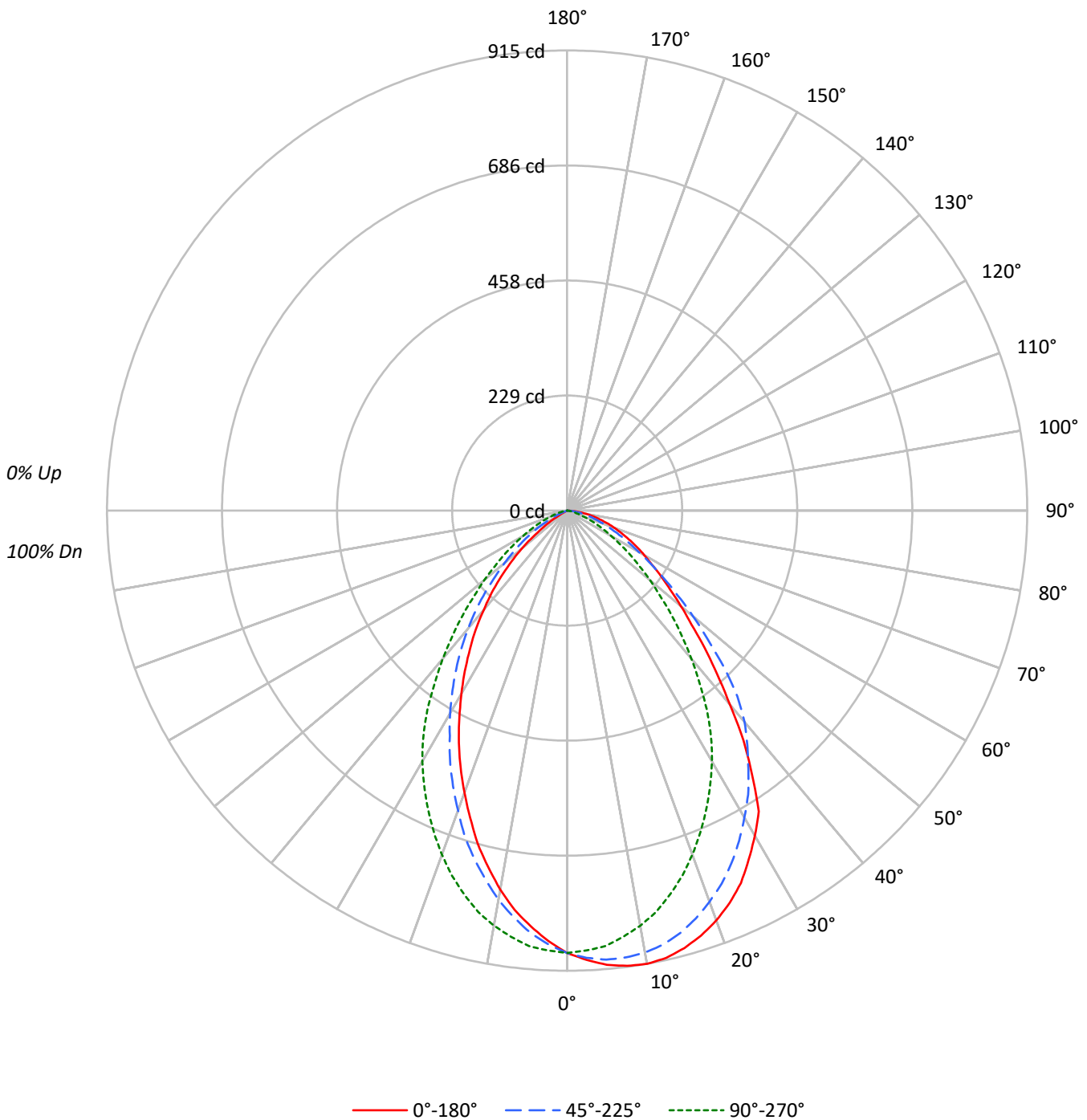
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	37876	37876	37876
5°	39188	37571	35864
10°	40008	36642	33459
15°	40139	35227	30591
20°	39734	33352	27349
25°	38827	31122	24205
30°	37118	28642	20886
35°	33665	25471	17708
40°	28288	21622	14495
45°	23552	17853	11271
50°	19780	14348	7937
55°	17175	11395	4219
60°	15224	8775	1076
65°	13774	6571	0
70°	12563	4456	0
75°	11063	2761	0
80°	9794	1537	0
85°	7213	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.0	5.9
10°-20°	222.2	15.9
20°-30°	302.8	21.6
30°-40°	309.1	22.1
40°-50°	238.9	17.1
50°-60°	144.3	10.3
60°-70°	69.2	4.9
70°-80°	26.8	1.9
80°-90°	5.4	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°	607.0	43.3
0°-40°	916.1	65.4
0°-60°	1299.3	92.8
0°-90°	1400.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1400.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	880	880	880	880	880	
5°	907	896	869	842	830	87
15°	900	869	790	715	686	254
25°	817	774	655	551	510	374
35°	640	628	485	385	337	398
45°	387	441	293	231	185	300
55°	229	235	152	108	56	206
65°	135	114	64	25	0	135
75°	66	48	17	0	0	72
85°	15	8	0	0	0	18
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°	879.7	879.7	879.7	879.7	879.7	879.7	879.7	879.7	879.7	879.7	879.7
2.5°	894.3	894.3	894.3	894.3	894.3	894.3	894.3	892.2	892.2	890.1	890.1
5°	906.7	906.7	906.7	904.7	904.7	902.6	902.6	900.5	900.5	896.3	896.3
7.5°	913.0	913.0	913.0	910.9	910.9	908.8	908.8	906.7	902.6	900.5	896.3
10°	915.1	915.1	913.0	913.0	908.8	908.8	908.8	904.7	900.5	896.3	892.2
12.5°	910.9	908.8	908.8	906.7	904.7	902.6	900.5	898.4	894.3	888.0	883.9
15°	900.5	900.5	900.5	898.4	894.3	892.2	892.2	888.0	881.8	875.5	869.3
17.5°	885.9	885.9	885.9	883.9	879.7	877.6	875.5	871.4	865.1	858.9	850.6
20°	867.2	867.2	865.1	863.1	858.9	858.9	856.8	850.6	844.4	836.0	827.7
22.5°	844.4	844.4	842.3	840.2	836.0	834.0	831.9	825.6	819.4	811.1	802.8
25°	817.3	815.2	813.2	811.1	809.0	804.8	802.8	798.6	792.4	782.0	773.6
27.5°	782.0	782.0	779.9	777.8	775.7	773.6	771.6	765.3	759.1	748.7	740.4
30°	746.6	746.6	744.5	742.4	740.4	738.3	734.1	727.9	723.7	715.4	705.0
32.5°	709.2	707.1	707.1	707.1	702.9	702.9	698.8	692.5	684.2	678.0	669.7
35°	640.5	642.6	644.7	650.9	653.0	657.2	657.2	655.1	646.8	638.5	628.1
37.5°	576.1	571.9	578.2	582.3	590.6	594.8	596.9	605.2	609.3	598.9	588.6
40°	503.3	507.4	511.6	517.8	526.2	528.2	534.5	540.7	551.1	555.3	549.0
42.5°	440.9	440.9	447.1	453.4	459.6	465.8	472.1	480.4	492.9	499.1	501.2
45°	386.8	384.7	386.8	395.1	403.5	407.6	411.8	422.2	434.7	443.0	440.9
47.5°	334.8	336.9	341.1	345.2	349.4	353.5	357.7	370.2	378.5	380.6	378.5
50°	295.3	293.2	297.4	299.5	305.7	307.8	312.0	318.2	324.4	326.5	326.5
52.5°	257.9	260.0	260.0	262.0	266.2	268.3	270.4	276.6	276.6	278.7	276.6
55°	228.8	226.7	228.8	230.8	232.9	235.0	237.1	237.1	237.1	237.1	235.0
57.5°	199.6	199.6	201.7	201.7	203.8	205.9	205.9	203.8	203.8	199.6	197.6
60°	176.8	176.8	176.8	176.8	178.9	178.9	178.9	174.7	170.5	170.5	164.3
62.5°	156.0	153.9	156.0	156.0	156.0	153.9	151.8	147.7	145.6	141.4	137.3
65°	135.2	135.2	135.2	135.2	133.1	133.1	131.0	126.9	122.7	120.6	114.4
67.5°	116.5	116.5	116.5	116.5	114.4	112.3	110.2	106.1	101.9	99.8	93.6
70°	99.8	97.7	97.7	97.7	95.7	93.6	91.5	89.4	85.3	81.1	76.9
72.5°	83.2	83.2	81.1	81.1	79.0	76.9	74.9	72.8	68.6	64.5	60.3
75°	66.5	66.5	66.5	64.5	62.4	62.4	60.3	56.2	54.1	49.9	47.8
77.5°	54.1	52.0	52.0	49.9	47.8	47.8	45.8	43.7	41.6	39.5	35.4
80°	39.5	39.5	39.5	37.4	35.4	35.4	33.3	31.2	29.1	27.0	25.0
82.5°	27.0	27.0	27.0	25.0	25.0	22.9	22.9	20.8	20.8	18.7	16.6
85°	14.6	14.6	14.6	14.6	14.6	12.5	12.5	12.5	10.4	10.4	8.3
87.5°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	2.1	2.1
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°	879.7	879.7	879.7	879.7	879.7	879.7	879.7	879.7	879.7	879.7	879.7
2.5°	888.0	888.0	885.9	883.9	883.9	881.8	879.7	879.7	877.6	875.5	873.5
5°	892.2	890.1	885.9	883.9	881.8	881.8	877.6	873.5	871.4	869.3	865.1
7.5°	892.2	888.0	883.9	879.7	877.6	875.5	869.3	865.1	861.0	854.8	850.6
10°	888.0	881.8	875.5	869.3	867.2	863.1	856.8	852.7	844.4	838.1	831.9
12.5°	877.6	871.4	863.1	854.8	850.6	846.4	838.1	831.9	823.6	817.3	809.0
15°	863.1	854.8	846.4	838.1	831.9	829.8	819.4	809.0	800.7	790.3	779.9
17.5°	842.3	834.0	823.6	815.2	809.0	804.8	792.4	782.0	771.6	761.2	750.8
20°	819.4	809.0	798.6	786.1	782.0	775.7	763.2	750.8	738.3	727.9	715.4
22.5°	792.4	782.0	769.5	759.1	750.8	744.5	732.0	717.5	705.0	692.5	680.1
25°	761.2	750.8	738.3	725.8	717.5	711.3	696.7	682.1	669.7	655.1	642.6
27.5°	730.0	717.5	705.0	688.4	682.1	673.8	659.3	644.7	630.1	615.6	601.0
30°	694.6	680.1	667.6	650.9	644.7	636.4	619.7	605.2	590.6	576.1	559.4
32.5°	657.2	642.6	628.1	613.5	605.2	596.9	582.3	565.7	547.0	532.4	519.9
35°	615.6	603.1	588.6	571.9	561.5	553.2	532.4	515.8	497.0	484.6	470.0
37.5°	578.2	561.5	542.8	522.0	511.6	501.2	480.4	463.8	449.2	432.6	420.1
40°	532.4	513.7	492.9	467.9	461.7	451.3	432.6	413.9	399.3	384.7	372.3
42.5°	482.5	461.7	443.0	422.2	411.8	401.4	382.7	363.9	349.4	336.9	324.4
45°	432.6	413.9	393.1	372.3	361.9	353.5	334.8	318.2	305.7	293.2	282.8
47.5°	376.4	363.9	345.2	326.5	314.0	305.7	291.2	276.6	262.0	249.6	243.3
50°	322.4	314.0	299.5	280.8	272.4	264.1	247.5	235.0	224.6	214.2	205.9
52.5°	272.4	266.2	255.8	239.2	232.9	222.5	210.0	199.6	189.3	180.9	174.7
55°	230.8	222.5	214.2	203.8	195.5	191.3	176.8	168.5	160.1	151.8	145.6
57.5°	191.3	187.2	178.9	170.5	164.3	158.1	147.7	139.3	133.1	124.8	120.6
60°	162.2	153.9	147.7	139.3	135.2	131.0	122.7	114.4	108.1	101.9	97.7
62.5°	133.1	126.9	120.6	112.3	110.2	106.1	99.8	91.5	87.3	81.1	76.9
65°	110.2	104.0	99.8	91.5	89.4	85.3	79.0	72.8	68.6	64.5	60.3
67.5°	89.4	85.3	79.0	72.8	70.7	66.5	60.3	56.2	52.0	47.8	45.8
70°	72.8	68.6	62.4	56.2	54.1	52.0	45.8	43.7	39.5	35.4	33.3
72.5°	58.2	54.1	47.8	43.7	41.6	39.5	35.4	31.2	29.1	25.0	22.9
75°	43.7	39.5	35.4	31.2	29.1	29.1	25.0	22.9	20.8	16.6	14.6
77.5°	33.3	29.1	25.0	22.9	20.8	18.7	16.6	14.6	12.5	10.4	8.3
80°	22.9	20.8	16.6	14.6	14.6	12.5	10.4	10.4	8.3	6.2	4.2
82.5°	14.6	12.5	10.4	8.3	8.3	8.3	6.2	4.2	4.2	4.2	2.1
85°	6.2	6.2	4.2	4.2	4.2	4.2	2.1	2.1	2.1	0.0	0.0
87.5°	2.1	2.1	0.0	2.1	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°	879.7	879.7	879.7	879.7	879.7	879.7	879.7	879.7	879.7	879.7	879.7
2.5°	873.5	871.4	869.3	869.3	867.2	867.2	865.1	865.1	863.1	863.1	861.0
5°	861.0	858.9	854.8	854.8	852.7	850.6	846.4	844.4	842.3	840.2	838.1
7.5°	846.4	840.2	836.0	834.0	831.9	827.7	823.6	819.4	815.2	813.2	809.0
10°	823.6	817.3	813.2	811.1	806.9	800.7	796.5	790.3	786.1	782.0	777.8
12.5°	800.7	792.4	784.0	782.0	777.8	769.5	765.3	757.0	750.8	746.6	742.4
15°	771.6	763.2	752.8	748.7	746.6	736.2	730.0	723.7	715.4	709.2	705.0
17.5°	738.3	730.0	719.6	713.3	709.2	700.9	690.5	684.2	678.0	667.6	663.4
20°	705.0	692.5	682.1	678.0	671.7	661.3	653.0	644.7	634.3	628.1	619.7
22.5°	665.5	655.1	642.6	636.4	632.2	619.7	611.4	601.0	592.7	586.5	576.1
25°	630.1	615.6	603.1	596.9	590.6	580.2	567.8	559.4	551.1	542.8	534.5
27.5°	588.6	574.0	561.5	557.4	551.1	536.6	528.2	515.8	505.4	499.1	490.8
30°	547.0	532.4	519.9	513.7	507.4	495.0	484.6	474.2	465.8	457.5	449.2
32.5°	505.4	492.9	480.4	474.2	467.9	455.5	445.1	432.6	424.3	413.9	405.5
35°	457.5	445.1	434.7	428.4	424.3	413.9	403.5	393.1	384.7	374.3	366.0
37.5°	407.6	395.1	388.9	382.7	378.5	370.2	361.9	353.5	345.2	336.9	326.5
40°	359.8	353.5	341.1	339.0	334.8	326.5	320.3	312.0	305.7	297.4	289.1
42.5°	316.1	305.7	297.4	295.3	291.2	284.9	278.7	272.4	268.3	260.0	253.7
45°	274.5	266.2	257.9	253.7	251.6	245.4	239.2	235.0	230.8	224.6	218.4
47.5°	235.0	226.7	220.4	218.4	214.2	210.0	203.8	199.6	193.4	189.3	183.0
50°	199.6	193.4	187.2	185.1	180.9	178.9	172.6	168.5	162.2	156.0	151.8
52.5°	168.5	162.2	158.1	156.0	153.9	147.7	143.5	139.3	133.1	128.9	122.7
55°	139.3	135.2	131.0	128.9	126.9	122.7	118.5	112.3	108.1	101.9	95.7
57.5°	114.4	110.2	106.1	104.0	101.9	97.7	93.6	89.4	83.2	76.9	70.7
60°	91.5	89.4	85.3	83.2	81.1	76.9	72.8	66.5	62.4	54.1	49.9
62.5°	72.8	70.7	66.5	64.5	62.4	56.2	52.0	47.8	41.6	35.4	29.1
65°	56.2	52.0	47.8	47.8	45.8	41.6	35.4	29.1	25.0	18.7	12.5
67.5°	41.6	37.4	33.3	33.3	31.2	27.0	20.8	16.6	10.4	6.2	0.0
70°	29.1	27.0	22.9	20.8	18.7	14.6	10.4	6.2	2.1	0.0	0.0
72.5°	20.8	16.6	14.6	12.5	10.4	6.2	2.1	0.0	0.0	0.0	0.0
75°	12.5	10.4	6.2	6.2	4.2	2.1	0.0	0.0	0.0	0.0	0.0
77.5°	6.2	6.2	2.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	4.2	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	2.1	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°	879.7	879.7	879.7	879.7	879.7	879.7	879.7	879.7
2.5°	861.0	858.9	858.9	858.9	858.9	858.9	856.8	856.8
5°	836.0	834.0	834.0	831.9	831.9	831.9	829.8	829.8
7.5°	806.9	804.8	802.8	802.8	800.7	800.7	798.6	800.7
10°	773.6	769.5	769.5	769.5	767.4	765.3	765.3	765.3
12.5°	738.3	734.1	732.0	730.0	727.9	727.9	725.8	725.8
15°	698.8	694.6	692.5	690.5	688.4	686.3	684.2	686.3
17.5°	657.2	653.0	650.9	648.9	644.7	644.7	642.6	640.5
20°	613.5	609.3	607.3	605.2	603.1	601.0	598.9	596.9
22.5°	569.8	567.8	561.5	561.5	557.4	555.3	553.2	553.2
25°	526.2	522.0	519.9	515.8	511.6	509.5	509.5	509.5
27.5°	482.5	478.3	474.2	472.1	470.0	467.9	463.8	463.8
30°	440.9	434.7	430.5	430.5	426.3	422.2	422.2	420.1
32.5°	399.3	393.1	388.9	386.8	384.7	380.6	378.5	378.5
35°	357.7	351.5	349.4	345.2	341.1	341.1	334.8	336.9
37.5°	320.3	312.0	309.9	307.8	301.6	299.5	297.4	299.5
40°	280.8	274.5	270.4	268.3	264.1	260.0	257.9	257.9
42.5°	243.3	239.2	235.0	232.9	226.7	222.5	220.4	222.5
45°	210.0	203.8	201.7	197.6	191.3	187.2	185.1	185.1
47.5°	176.8	172.6	166.4	164.3	158.1	153.9	149.7	149.7
50°	145.6	139.3	135.2	131.0	126.9	120.6	116.5	118.5
52.5°	116.5	108.1	106.1	101.9	95.7	89.4	85.3	85.3
55°	89.4	83.2	79.0	76.9	68.6	62.4	58.2	56.2
57.5°	64.5	58.2	56.2	52.0	45.8	39.5	33.3	33.3
60°	43.7	37.4	33.3	31.2	25.0	20.8	14.6	12.5
62.5°	22.9	18.7	14.6	12.5	8.3	4.2	4.2	2.1
65°	6.2	2.1	2.1	2.1	2.1	2.1	2.1	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

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