

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO COMMERCIAL

Report Number: P583472

Luminaire Tested: **HC805D010-HM80520835-81WWW**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P583472
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/21/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC805D010-HM80520835-81WWW
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WALLWASH DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 667.5 lumens
Efficiency: N/A
Efficacy: 111.2 lumens/watt
Spacing Criteria (0/90/45): 1.09 / 1.04 / 1.13
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

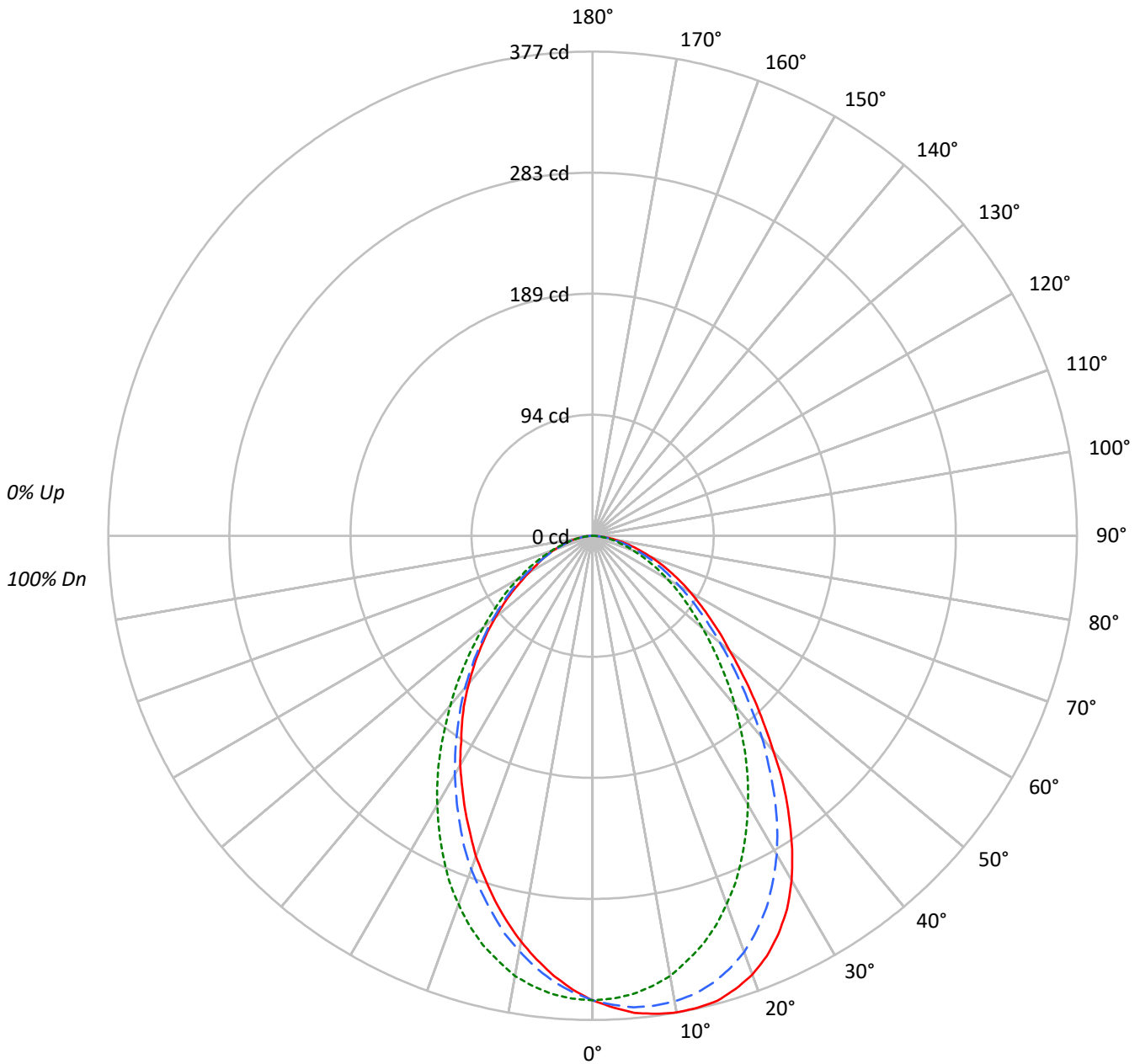
Input Watts (W): 6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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								
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87								
2	102	95	89	84	99	93	88	83	90	85	81	86	83	79	83	80	78	76								
3	94	85	78	72	92	83	77	71	81	75	70	78	73	69	75	71	68	66								
4	87	76	69	63	85	75	68	62	73	67	62	71	65	61	68	64	60	58								
5	81	69	61	55	79	68	61	55	66	60	54	64	59	54	63	57	53	51								
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46								
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	41								
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38								
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34								
10	58	46	39	34	57	45	38	34	44	38	33	44	38	33	43	37	33	32								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	11153	11153	11153
5°	11546	11091	10648
10°	11801	10897	10048
15°	11968	10529	9386
20°	11932	10015	8712
25°	11640	9367	7999
30°	11027	8613	7339
35°	10032	7796	6671
40°	8812	6932	6022
45°	7684	6097	5373
50°	6683	5344	4730
55°	5968	4699	4118
60°	5421	4120	3515
65°	4874	3583	3189
70°	4337	3056	2867
75°	3789	2562	2454
80°	3232	2078	2166
85°	2406	1557	1734



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.9	5.1
10°-20°	93.3	14.0
20°-30°	129.6	19.4
30°-40°	134.0	20.1
40°-50°	112.2	16.8
50°-60°	81.4	12.2
60°-70°	51.4	7.7
70°-80°	25.4	3.8
80°-90°	6.3	0.9
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°	256.8	38.5
0°-40°	390.8	58.5
0°-60°	584.3	87.5
0°-90°	667.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	667.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	362	362	362	362	362	
5°	373	369	358	348	344	36
15°	375	361	330	303	294	106
25°	342	320	275	245	235	157
35°	266	247	207	184	177	166
45°	176	163	140	126	123	136
55°	111	101	87	80	77	100
65°	67	58	49	43	44	67
75°	32	26	22	21	21	34
85°	7	5	4	5	5	8
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°	361.7	361.7	361.7	361.7	361.7	361.7	361.7	361.7	361.7	361.7	361.7
2.5°	367.6	367.6	368.1	367.6	367.6	367.6	367.1	367.1	366.6	366.6	365.6
5°	373.0	372.0	373.0	372.0	372.0	372.0	371.5	370.5	370.0	369.0	368.6
7.5°	375.4	374.9	374.9	374.4	374.4	373.9	373.5	373.0	371.1	370.5	369.0
10°	376.9	376.5	376.5	376.0	374.9	374.9	373.9	373.5	371.1	370.0	368.1
12.5°	376.5	376.5	376.5	376.0	374.4	373.9	373.0	371.5	369.5	367.6	365.6
15°	374.9	374.9	373.9	373.5	372.0	371.1	370.5	368.1	366.2	363.6	360.7
17.5°	370.0	370.0	369.5	368.6	367.1	366.2	365.1	362.7	360.7	356.8	353.8
20°	363.6	363.2	362.7	361.3	359.7	359.2	357.8	354.3	351.9	348.9	345.0
22.5°	354.3	353.8	353.4	352.4	349.9	348.9	348.0	345.5	341.0	338.2	333.2
25°	342.1	342.1	341.0	339.6	337.2	336.1	334.7	332.3	328.3	323.9	320.0
27.5°	327.9	327.4	325.8	324.9	323.0	321.4	319.0	316.0	312.2	308.7	303.8
30°	309.7	309.7	308.7	307.3	304.8	303.8	301.8	298.4	294.5	290.0	286.6
32.5°	289.1	289.1	287.6	286.6	285.1	282.7	282.1	278.3	274.8	271.4	267.4
35°	266.5	266.9	266.0	264.1	261.5	261.5	260.6	257.1	253.3	249.8	246.8
37.5°	243.9	242.4	241.9	241.0	239.5	237.5	236.5	235.1	231.6	229.2	224.8
40°	218.9	219.4	218.3	217.4	216.9	215.5	215.0	212.5	210.1	207.1	205.2
42.5°	196.3	196.3	196.3	195.4	194.4	192.8	192.4	190.9	187.9	186.0	183.0
45°	176.2	174.8	174.8	174.2	173.7	172.7	171.3	170.3	168.3	166.9	163.4
47.5°	156.6	157.0	156.6	156.1	154.5	154.1	153.6	151.7	149.6	148.2	145.8
50°	139.3	140.4	139.3	139.3	138.4	137.9	136.9	135.5	133.9	131.6	129.0
52.5°	125.1	125.1	124.6	124.1	122.7	121.7	121.3	120.8	118.3	116.3	114.3
55°	111.0	111.4	111.4	109.9	109.4	108.4	108.0	106.5	105.5	102.6	101.1
57.5°	98.6	98.2	98.6	97.7	96.7	95.6	95.2	94.2	92.8	90.7	88.8
60°	87.9	86.9	86.9	86.4	85.3	84.9	83.9	82.5	80.9	79.0	77.6
62.5°	77.1	76.6	76.0	75.5	74.6	74.1	73.6	72.2	70.6	69.2	67.8
65°	66.8	66.8	66.2	65.2	64.8	64.3	63.8	62.8	60.8	59.8	58.4
67.5°	57.5	57.0	57.0	55.9	54.9	54.5	54.5	53.5	52.1	50.5	49.6
70°	48.1	48.6	48.1	47.6	46.6	46.6	45.6	45.1	43.2	42.7	41.2
72.5°	39.7	39.7	39.3	39.3	38.3	37.8	37.8	36.7	35.8	34.8	33.9
75°	31.8	31.8	31.8	31.4	30.9	29.9	29.9	29.4	28.5	27.5	26.5
77.5°	25.0	24.5	24.5	24.1	23.6	23.1	23.1	22.6	21.5	21.1	20.1
80°	18.2	17.7	17.7	17.7	16.6	17.1	16.6	16.2	15.7	15.2	14.7
82.5°	11.7	12.2	12.2	11.7	11.3	11.3	11.3	10.8	10.8	10.3	9.8
85°	6.8	6.8	6.8	6.8	6.3	6.3	6.3	5.9	5.9	5.9	5.4
87.5°	3.0	3.0	3.0	3.0	3.0	3.0	2.4	2.4	2.4	2.4	2.4
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°	361.7	361.7	361.7	361.7	361.7	361.7	361.7	361.7	361.7	361.7	361.7
2.5°	365.6	364.6	364.1	363.6	363.6	363.2	362.7	361.7	361.7	360.7	360.2
5°	367.6	366.2	365.1	364.1	363.6	362.7	361.7	360.2	359.7	358.3	356.8
7.5°	368.1	365.6	364.6	362.7	361.7	360.7	358.7	357.3	355.3	353.8	351.9
10°	366.2	364.1	361.7	359.2	358.7	357.3	354.3	352.4	349.9	348.0	345.0
12.5°	363.2	360.2	357.8	354.8	353.4	351.9	348.9	345.9	342.6	339.1	336.1
15°	358.3	354.8	351.4	348.0	345.9	344.5	341.0	337.7	334.2	329.8	326.9
17.5°	350.8	347.0	343.5	339.1	337.2	335.6	331.2	327.4	323.0	318.5	315.5
20°	341.6	336.7	332.8	327.9	326.3	323.9	319.5	315.1	310.1	305.2	301.8
22.5°	329.3	324.4	320.0	315.1	312.7	310.1	305.7	300.3	295.4	291.5	288.1
25°	315.1	310.6	305.2	300.8	297.9	294.9	290.0	285.6	281.2	275.3	271.8
27.5°	299.4	294.0	290.0	284.2	281.2	279.3	273.9	268.0	264.1	258.7	254.7
30°	281.7	276.7	272.3	266.5	263.6	261.5	256.6	251.3	247.3	241.9	238.0
32.5°	263.1	257.6	252.2	248.4	244.9	242.9	237.5	234.1	229.2	224.8	220.4
35°	242.9	237.5	233.7	228.1	226.2	224.3	219.9	215.5	211.0	207.1	203.6
37.5°	221.3	217.4	212.9	209.1	207.6	205.6	200.3	196.3	192.8	188.9	186.0
40°	200.3	196.8	193.8	190.0	187.5	186.0	182.1	178.6	174.8	172.2	169.3
42.5°	181.1	177.2	174.2	171.3	168.8	167.3	163.9	161.5	158.5	156.1	152.6
45°	161.0	159.0	155.6	153.1	151.7	149.6	147.2	144.2	141.8	139.8	137.4
47.5°	143.3	141.4	138.9	136.0	134.9	133.5	131.1	129.0	127.1	125.1	122.7
50°	127.1	124.6	122.7	120.8	119.7	118.3	115.9	114.8	113.4	111.4	109.9
52.5°	112.4	110.4	108.4	106.1	105.5	104.5	103.1	101.1	99.6	98.6	97.7
55°	99.1	97.2	95.6	93.7	93.2	92.3	90.3	89.3	88.3	87.4	86.4
57.5°	87.4	85.3	83.4	82.5	81.5	80.4	80.0	78.5	77.6	77.1	76.0
60°	76.6	74.6	73.1	71.7	71.1	70.6	69.7	68.7	67.8	66.8	66.2
62.5°	66.2	64.3	63.3	62.4	61.3	61.3	60.3	59.4	58.4	57.9	57.0
65°	57.0	55.9	54.5	53.0	52.5	52.5	51.0	50.5	50.0	49.1	48.1
67.5°	48.1	47.2	45.6	45.1	44.6	44.2	43.7	42.7	41.7	41.2	40.2
70°	40.2	39.3	38.3	37.8	37.3	36.7	35.8	35.3	34.4	33.9	33.4
72.5°	32.4	31.8	30.9	30.4	29.9	29.4	29.0	28.5	27.5	26.9	26.5
75°	26.0	25.5	24.5	24.1	23.6	23.6	23.1	22.0	21.5	21.5	21.1
77.5°	19.6	19.2	18.7	18.2	17.7	17.7	17.1	16.6	16.2	16.2	15.7
80°	14.2	13.8	13.3	13.3	13.3	12.8	12.2	12.2	11.7	11.7	11.3
82.5°	9.3	9.3	8.9	8.9	8.9	8.4	8.4	7.9	7.9	7.9	7.9
85°	5.4	5.4	5.4	4.9	4.9	4.9	4.9	4.9	4.9	4.4	4.9
87.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	1.9	1.9	1.9
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°	361.7	361.7	361.7	361.7	361.7	361.7	361.7	361.7	361.7	361.7	361.7
2.5°	359.7	359.2	358.3	358.3	357.3	357.3	356.8	356.3	355.7	355.3	354.8
5°	356.3	354.3	353.4	352.9	351.9	351.4	349.9	348.9	348.4	347.5	346.5
7.5°	349.9	348.0	345.9	345.5	345.0	343.1	341.6	340.1	339.1	338.2	337.2
10°	342.6	340.5	338.2	337.2	336.1	333.7	331.8	330.3	328.3	326.3	325.8
12.5°	333.7	330.7	327.9	326.9	325.3	323.0	320.9	318.5	317.1	314.6	314.1
15°	323.4	320.0	317.6	315.1	314.1	311.6	308.2	306.2	303.3	302.4	299.8
17.5°	311.1	307.7	304.3	303.3	301.8	298.4	294.9	292.5	289.6	288.1	286.6
20°	298.4	294.0	290.5	289.6	287.6	284.6	281.2	278.8	276.3	273.4	271.8
22.5°	283.7	278.8	275.8	273.4	272.9	269.4	265.5	263.6	261.5	259.2	257.1
25°	267.4	263.1	259.6	257.6	256.6	253.8	250.8	248.4	245.4	243.9	241.4
27.5°	250.8	247.8	243.5	241.4	240.0	237.5	234.1	232.6	229.7	227.7	226.2
30°	234.6	230.2	227.7	225.3	223.8	221.3	218.3	216.9	214.5	212.5	211.0
32.5°	216.9	214.0	210.6	209.6	207.6	205.2	203.1	200.7	198.7	196.8	196.3
35°	200.7	196.8	193.3	192.4	190.9	188.4	187.5	186.0	183.5	183.0	181.1
37.5°	183.0	181.1	177.2	175.7	175.2	173.2	171.3	170.3	168.8	167.3	166.9
40°	166.4	163.9	162.0	160.5	159.4	158.0	156.1	155.6	154.5	152.6	152.1
42.5°	150.7	148.2	146.3	145.8	144.2	142.8	141.8	140.4	139.8	139.3	138.4
45°	135.5	133.9	132.0	131.6	131.1	129.0	128.1	127.1	126.2	125.7	124.6
47.5°	121.7	120.2	118.7	118.3	117.3	116.8	115.3	114.8	113.4	112.9	112.4
50°	108.4	107.5	106.5	106.1	105.0	104.5	103.5	102.6	101.6	101.1	100.5
52.5°	96.7	95.6	94.7	94.2	93.7	92.8	91.8	90.7	90.3	89.8	89.3
55°	85.3	84.4	83.9	83.4	83.0	82.5	80.9	80.4	80.0	79.5	78.5
57.5°	75.1	74.1	73.1	73.1	72.7	72.2	71.1	70.1	70.1	69.2	68.2
60°	65.7	64.8	63.8	63.3	62.8	61.9	61.3	60.8	60.3	59.8	58.9
62.5°	55.9	55.4	54.5	54.5	53.5	53.0	52.5	52.1	51.5	50.5	50.0
65°	47.6	47.2	46.1	45.6	45.6	45.1	44.2	43.7	43.2	43.2	42.7
67.5°	39.7	39.3	38.3	37.8	37.8	37.3	36.7	36.7	36.3	35.8	36.3
70°	32.9	31.8	31.8	31.4	31.4	30.9	30.4	30.4	30.4	30.9	30.9
72.5°	26.0	25.5	25.0	25.0	25.0	25.0	24.5	24.5	25.0	25.5	25.5
75°	20.6	20.1	20.1	20.1	19.6	19.6	20.1	20.1	20.6	20.6	20.6
77.5°	15.2	15.2	15.2	15.2	15.2	15.2	15.7	15.7	16.2	16.2	16.2
80°	11.3	11.3	11.3	11.3	11.3	11.7	11.7	11.7	11.7	11.7	12.2
82.5°	7.9	7.9	7.9	7.9	7.9	7.9	7.9	8.4	8.4	8.4	8.4
85°	4.4	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
87.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
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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CATALOG NUMBER: HC805D010-HM80520835-81WWW

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	361.7	361.7	361.7	361.7	361.7	361.7	361.7	361.7
2.5°	354.3	354.3	354.3	354.8	353.8	353.8	353.8	353.8
5°	345.9	345.5	345.0	345.5	344.5	344.5	344.0	344.0
7.5°	335.6	335.2	334.7	334.7	333.7	333.7	333.2	332.8
10°	324.4	323.4	323.9	323.0	322.5	322.0	321.4	320.9
12.5°	312.2	311.1	310.6	309.7	308.7	308.2	308.7	307.7
15°	298.9	297.5	296.9	295.9	294.9	294.5	294.5	294.0
17.5°	284.2	283.2	282.7	281.7	281.2	280.2	279.7	279.3
20°	270.4	268.0	268.5	267.4	266.9	265.0	265.0	265.5
22.5°	255.2	253.8	252.7	251.7	251.3	250.3	250.3	249.8
25°	240.0	238.6	238.0	237.0	236.5	235.6	235.1	235.1
27.5°	225.3	223.2	223.2	222.3	221.3	220.8	220.4	219.9
30°	209.6	208.0	207.6	207.6	207.1	207.1	205.6	206.1
32.5°	194.9	193.8	193.3	192.4	192.4	191.9	191.9	190.4
35°	180.1	178.6	179.1	178.1	177.6	177.2	177.6	177.2
37.5°	165.9	164.9	164.9	163.9	163.9	163.4	162.9	163.9
40°	151.7	151.2	150.7	150.2	150.7	150.2	149.1	149.6
42.5°	137.4	137.4	136.9	136.9	136.5	136.5	136.5	136.5
45°	124.6	124.1	124.1	123.7	123.7	123.7	123.7	123.2
47.5°	111.9	111.4	111.4	111.4	111.0	111.0	110.4	111.0
50°	99.6	99.6	99.1	99.1	99.6	99.1	98.6	98.6
52.5°	88.3	88.3	87.9	87.9	87.4	86.9	87.4	87.4
55°	78.0	77.6	77.1	77.1	76.6	76.0	76.0	76.6
57.5°	68.2	67.8	67.3	67.3	66.2	65.7	65.7	65.7
60°	58.9	57.9	57.9	57.5	57.5	57.0	57.0	57.0
62.5°	50.0	49.6	49.6	49.6	49.6	49.1	49.1	49.1
65°	42.7	42.7	42.7	43.2	43.2	43.7	43.7	43.7
67.5°	36.7	37.3	37.3	37.3	37.8	37.8	37.8	37.3
70°	31.4	31.4	31.4	31.8	31.8	31.8	31.8	31.8
72.5°	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0
75°	20.6	21.1	21.1	21.1	20.6	21.1	21.1	20.6
77.5°	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2
80°	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2
82.5°	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4
85°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
87.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)