

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: P583634

Luminaire Tested: **HC807D010-HM80520927-81RWWC**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P583634
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-14)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/21/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC807D010-HM80520927-81RWWC
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WALLWASH DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 723.6 lumens
Efficiency: N/A
Efficacy: 90.5 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.08 / 1.17
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

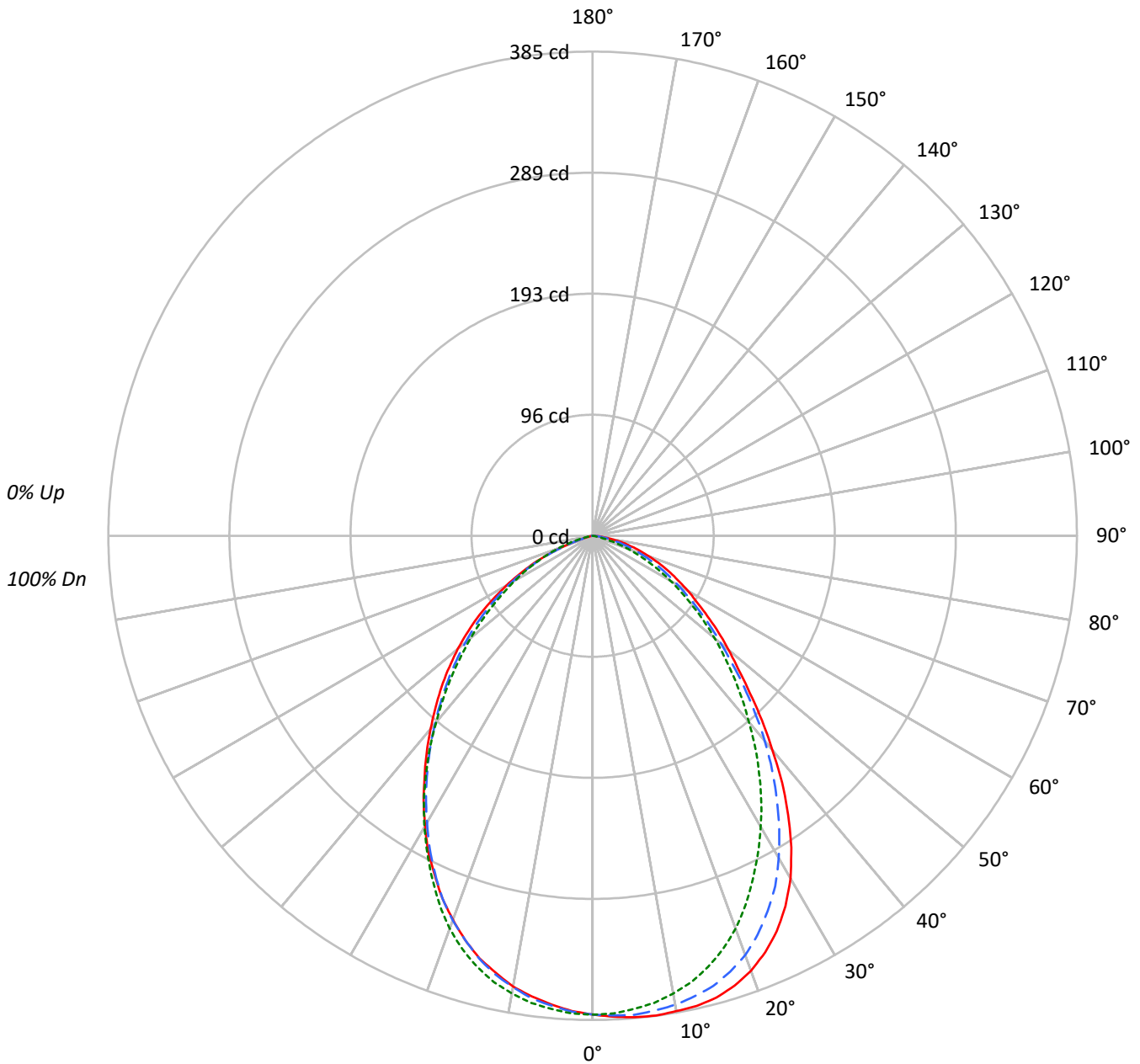
Input Watts (W): 8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88																			
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	84	82	79	77																			
3	95	86	79	73	93	84	78	73	82	76	72	79	74	70	76	73	69	67																			
4	88	77	70	64	86	76	69	64	74	68	63	72	66	62	69	65	61	59																			
5	81	70	62	56	80	69	62	56	67	61	56	65	59	55	63	58	54	52																			
6	76	64	56	50	74	63	55	50	61	55	50	60	54	49	58	53	49	47																			
7	71	59	51	45	69	58	50	45	56	50	45	55	49	44	54	48	44	42																			
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38																			
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35																			
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	11739	11739	11739
5°	11896	11691	11583
10°	12018	11570	11398
15°	12138	11327	11100
20°	12079	10908	10658
25°	11796	10255	10115
30°	11202	9518	9486
35°	10198	8688	8764
40°	8944	7773	8063
45°	7714	6916	7405
50°	6755	6073	6707
55°	5989	5215	5903
60°	5396	4391	4891
65°	4859	3524	3750
70°	4265	2561	2056
75°	3634	1334	536
80°	2806	355	89
85°	1804	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.9	5.0
10°-20°	101.0	14.0
20°-30°	143.3	19.8
30°-40°	150.9	20.9
40°-50°	128.4	17.7
50°-60°	92.8	12.8
60°-70°	52.8	7.3
70°-80°	16.6	2.3
80°-90°	2.0	0.3
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°	280.2	38.7
0°-40°	431.1	59.6
0°-60°	652.2	90.1
0°-90°	723.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	723.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	381	381	381	381	381	
5°	384	382	378	375	374	37
15°	380	371	355	348	348	107
25°	347	329	301	296	297	159
35°	271	255	231	229	233	169
45°	177	170	159	163	170	137
55°	111	103	97	103	110	100
65°	67	58	48	48	51	66
75°	30	23	11	5	4	33
85°	5	3	0	0	0	7
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°	380.7	380.7	380.7	380.7	380.7	380.7	380.7	380.7	380.7	380.7	380.7
2.5°	382.8	383.2	382.3	382.3	383.2	382.3	382.8	382.8	382.3	382.3	381.8
5°	384.3	383.8	383.8	383.8	384.3	383.2	382.8	383.2	382.3	382.3	382.3
7.5°	384.8	384.8	384.3	383.8	383.8	383.8	383.2	382.8	382.3	381.2	380.7
10°	383.8	383.8	384.3	383.2	383.2	382.3	382.3	381.2	381.2	380.2	378.7
12.5°	382.8	382.3	382.3	381.2	381.2	380.2	380.2	378.7	378.2	376.7	375.1
15°	380.2	379.8	378.7	378.2	377.7	377.1	376.2	375.7	374.2	372.1	370.6
17.5°	375.1	374.6	374.2	373.1	372.1	371.6	371.0	369.5	367.5	366.0	363.4
20°	368.1	367.5	367.5	366.0	365.4	364.0	363.4	361.4	359.9	356.8	354.8
22.5°	358.4	358.9	357.9	356.8	355.9	354.3	353.2	351.2	348.7	345.7	343.1
25°	346.7	347.1	346.2	345.1	343.7	342.6	341.7	338.5	336.0	332.4	329.3
27.5°	332.0	332.0	332.0	330.9	328.4	327.9	326.8	323.8	320.3	317.2	314.2
30°	314.6	314.2	314.2	312.6	311.7	309.6	308.1	305.6	302.9	299.3	295.9
32.5°	293.9	294.3	292.8	291.8	290.3	290.3	288.2	286.2	283.1	279.6	276.0
35°	270.9	271.5	270.4	270.0	267.3	266.8	266.4	263.9	261.8	259.2	255.1
37.5°	247.6	247.0	246.5	246.5	245.0	244.0	242.9	241.5	238.4	236.4	234.3
40°	222.2	222.2	222.2	221.7	221.1	220.1	219.6	218.6	216.5	214.5	212.9
42.5°	199.2	199.2	198.7	198.3	197.2	197.8	196.7	195.7	193.7	192.2	191.1
45°	176.9	176.9	176.9	177.5	176.4	174.8	174.8	173.9	172.8	171.8	170.3
47.5°	157.0	158.6	157.6	157.0	157.6	155.6	155.6	154.5	153.6	152.5	150.5
50°	140.8	140.8	140.8	139.8	139.3	139.3	137.8	136.7	136.2	135.3	133.1
52.5°	126.1	125.0	125.0	124.5	124.0	123.0	123.0	122.0	120.0	118.9	117.5
55°	111.4	111.4	110.8	110.3	109.8	109.3	108.7	107.3	106.2	104.7	103.2
57.5°	98.1	99.1	98.6	97.6	96.6	96.6	95.6	94.5	93.0	91.5	90.0
60°	87.5	86.9	86.9	86.4	85.4	84.8	84.4	82.8	81.4	79.8	78.3
62.5°	76.2	76.2	76.2	75.3	74.2	73.7	73.3	72.2	70.1	68.6	67.6
65°	66.6	66.1	65.6	65.0	64.5	63.6	63.0	62.0	60.5	58.9	57.5
67.5°	56.9	56.4	56.4	55.9	54.4	53.9	53.9	52.3	50.8	49.4	47.8
70°	47.3	47.3	47.3	46.2	45.8	45.3	44.7	43.7	42.2	40.6	39.2
72.5°	39.2	38.6	38.6	38.1	36.6	36.1	35.6	34.5	33.0	32.0	31.0
75°	30.5	30.5	30.0	29.5	28.9	28.4	28.0	26.9	25.5	23.9	23.4
77.5°	23.4	22.8	22.8	22.3	21.4	20.8	20.8	19.8	18.3	17.3	16.3
80°	15.8	16.3	15.8	15.3	14.7	14.2	13.7	13.3	12.2	11.2	10.2
82.5°	9.7	10.2	9.7	9.7	9.2	8.6	8.6	7.6	7.2	6.6	6.1
85°	5.1	5.1	5.1	5.1	4.5	4.5	4.5	4.1	3.6	3.1	3.1
87.5°	1.6	2.0	1.6	1.6	1.6	1.6	1.6	1.6	1.1	1.1	1.1
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°	380.7	380.7	380.7	380.7	380.7	380.7	380.7	380.7	380.7	380.7	380.7
2.5°	382.3	381.8	381.2	381.2	381.2	381.2	381.2	380.7	380.2	380.2	380.2
5°	381.2	381.2	381.2	380.7	380.2	380.2	379.2	378.7	378.2	377.7	377.1
7.5°	380.2	379.2	378.7	378.2	377.7	377.7	376.7	375.7	375.7	374.6	373.7
10°	377.1	376.7	375.7	374.6	374.2	373.7	372.6	371.0	370.6	369.5	368.5
12.5°	373.7	372.6	371.6	369.5	369.0	368.5	366.5	365.0	364.0	363.4	360.9
15°	369.0	367.0	365.4	362.9	362.4	361.4	359.9	358.4	356.3	354.8	353.8
17.5°	360.9	358.9	356.3	353.8	352.8	352.8	350.3	348.2	345.7	344.6	342.6
20°	351.2	348.7	346.7	343.7	342.1	340.6	339.0	336.0	334.0	332.4	329.9
22.5°	340.1	336.5	334.0	330.9	328.4	326.8	324.3	321.8	319.2	317.8	315.7
25°	325.9	322.8	318.7	315.7	314.2	312.1	309.0	306.5	304.0	301.4	300.4
27.5°	310.1	306.0	302.5	298.9	297.3	295.9	292.3	289.2	287.2	284.6	283.7
30°	292.8	288.7	284.6	281.7	280.1	277.6	275.6	272.0	269.4	267.3	264.8
32.5°	272.9	270.0	266.4	261.8	260.7	258.7	255.7	254.2	251.1	249.6	247.6
35°	251.7	249.6	246.1	242.5	240.9	240.0	237.4	234.3	232.3	230.8	229.8
37.5°	231.2	228.7	225.1	222.6	221.7	220.1	217.0	215.6	213.5	212.5	210.4
40°	209.5	206.9	204.3	202.8	201.2	200.3	198.3	196.7	194.7	193.1	192.6
42.5°	188.1	186.5	184.5	182.5	182.0	180.4	179.5	177.9	176.4	175.9	174.4
45°	168.7	167.2	165.1	163.1	162.6	161.7	161.1	159.7	158.6	158.6	158.6
47.5°	149.5	147.9	145.9	144.8	145.4	143.4	143.4	142.8	141.8	141.8	142.3
50°	132.2	130.1	129.7	128.6	127.6	126.6	127.0	125.6	125.6	126.6	126.1
52.5°	115.9	113.9	113.4	112.3	111.9	111.9	111.4	111.4	110.8	111.4	111.4
55°	101.1	99.7	98.6	97.6	97.0	97.0	97.0	96.6	96.1	97.0	97.6
57.5°	88.0	87.5	86.4	84.8	84.4	83.9	83.4	83.4	83.4	83.4	83.9
60°	76.2	75.3	74.2	72.7	72.7	72.2	71.7	71.2	71.2	71.2	71.2
62.5°	66.1	64.5	63.0	62.0	61.5	60.9	60.5	59.5	59.5	59.5	59.5
65°	55.9	54.4	53.4	52.3	51.4	51.4	50.3	49.8	48.8	48.3	47.3
67.5°	46.2	45.3	44.2	42.7	42.2	41.7	40.6	40.2	38.6	38.1	37.6
70°	37.6	36.1	35.1	34.1	33.6	32.5	31.5	30.5	29.5	28.4	27.5
72.5°	29.5	28.0	26.9	25.9	24.9	24.9	23.4	22.3	20.8	19.8	18.3
75°	21.9	20.3	19.4	17.8	17.3	16.7	15.3	14.2	12.7	11.2	10.2
77.5°	14.7	13.7	12.7	11.2	10.2	10.2	8.6	7.6	6.6	5.1	4.5
80°	9.2	8.1	7.2	6.1	6.1	5.1	4.5	3.6	2.5	2.0	1.6
82.5°	5.1	4.5	4.1	3.1	3.1	2.5	2.0	1.6	1.1	0.5	0.5
85°	2.5	2.0	1.6	1.6	1.1	1.1	1.1	0.5	0.5	0.0	0.0
87.5°	1.1	0.5	0.5	0.5	0.5	0.5	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°	380.7	380.7	380.7	380.7	380.7	380.7	380.7	380.7	380.7	380.7	380.7
2.5°	379.8	379.8	379.2	379.2	379.2	378.7	379.2	378.7	378.7	378.7	379.2
5°	377.7	376.7	376.7	376.2	376.2	375.7	376.2	375.7	375.1	374.6	375.1
7.5°	373.7	372.6	372.1	371.6	371.6	371.6	371.0	370.6	371.0	369.5	370.6
10°	368.1	367.5	366.5	366.0	365.4	366.0	365.4	364.5	364.5	364.5	364.0
12.5°	360.9	359.9	359.3	358.9	357.9	357.9	358.4	357.3	357.3	356.3	356.3
15°	352.3	351.2	350.3	350.3	349.2	349.2	348.7	348.7	348.2	347.7	347.7
17.5°	341.7	340.1	339.0	339.6	339.0	338.5	338.5	337.5	337.0	337.5	337.5
20°	328.9	327.9	326.8	327.3	326.4	325.9	326.4	324.8	325.3	325.3	325.3
22.5°	314.6	314.2	312.6	312.6	311.7	311.1	311.7	311.7	312.1	311.7	311.7
25°	298.9	297.9	296.8	296.8	296.4	295.9	296.4	296.8	296.4	296.8	296.8
27.5°	282.1	280.6	280.6	279.6	279.6	280.1	279.6	280.1	280.6	280.6	281.7
30°	263.9	263.3	262.8	262.3	262.3	262.8	262.8	262.8	263.3	264.3	264.3
32.5°	246.5	245.6	244.5	244.5	245.6	245.0	245.6	245.6	246.5	246.5	247.6
35°	227.8	227.8	226.7	227.2	227.2	227.2	227.2	228.2	229.2	229.8	230.8
37.5°	210.4	208.9	209.5	209.5	210.0	209.5	210.9	210.9	212.0	212.0	212.9
40°	191.7	191.7	192.2	191.7	192.2	192.2	193.1	194.2	194.7	195.7	196.2
42.5°	173.9	174.8	173.9	174.4	174.8	175.4	175.9	176.4	178.4	179.5	180.9
45°	157.6	158.1	158.6	159.1	158.6	159.7	160.1	161.1	162.6	163.1	163.7
47.5°	141.8	142.3	142.8	143.4	143.4	144.4	144.8	145.9	146.9	147.5	147.9
50°	126.6	127.6	128.1	128.1	128.6	129.7	130.6	130.6	131.7	133.1	133.7
52.5°	112.8	112.8	113.9	114.4	114.8	114.8	116.4	116.9	117.5	118.4	119.5
55°	97.6	99.1	99.7	99.7	100.6	101.7	102.2	102.7	102.7	104.7	104.7
57.5°	84.4	84.8	85.9	85.9	85.9	87.5	87.5	88.4	88.9	89.5	90.5
60°	71.2	72.2	72.2	72.7	72.2	73.3	73.7	74.7	75.3	75.8	76.2
62.5°	58.9	58.9	59.5	59.5	59.5	59.5	60.5	60.5	61.5	62.0	62.5
65°	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.8	47.8	48.8
67.5°	36.6	36.1	35.1	35.6	35.1	35.1	34.5	34.5	35.1	35.1	36.1
70°	26.4	25.9	24.9	24.9	24.4	23.9	23.4	22.8	22.3	22.3	22.3
72.5°	17.3	16.3	14.7	14.2	14.2	13.3	12.2	11.7	11.7	11.7	11.7
75°	8.6	7.6	6.6	6.1	6.1	5.1	5.6	5.1	5.1	5.1	5.1
77.5°	3.6	2.5	2.0	2.0	2.0	1.6	1.6	1.6	1.6	1.6	1.6
80°	1.1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
82.5°	0.5	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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CATALOG NUMBER: HC807D010-HM80520927-81RWWC

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	380.7	380.7	380.7	380.7	380.7	380.7	380.7	380.7
2.5°	378.7	378.7	377.7	378.2	378.2	378.2	378.2	378.2
5°	374.2	374.6	374.2	374.6	374.6	374.2	374.2	374.2
7.5°	369.5	370.1	369.5	370.1	370.1	370.1	369.5	369.5
10°	364.0	364.0	364.0	364.0	364.0	363.4	364.0	364.0
12.5°	356.3	356.3	356.3	356.8	356.8	356.3	356.3	355.9
15°	348.2	347.1	347.7	348.2	347.7	347.7	347.7	347.7
17.5°	337.0	337.5	337.0	337.0	337.0	337.0	337.5	337.0
20°	325.3	325.3	325.9	325.3	325.3	325.3	325.3	324.8
22.5°	312.1	311.7	311.7	312.1	312.1	311.7	312.1	312.1
25°	297.3	297.9	297.3	297.3	297.9	297.9	297.9	297.3
27.5°	281.7	282.1	282.6	282.1	282.1	282.1	282.6	283.1
30°	265.3	266.4	265.3	265.3	266.4	265.9	266.4	266.4
32.5°	248.1	249.6	248.6	249.6	249.6	250.1	249.6	250.1
35°	230.8	232.3	232.3	232.3	232.8	233.3	233.3	232.8
37.5°	214.5	215.0	215.0	216.1	216.5	217.0	217.0	216.5
40°	197.8	198.7	199.2	199.2	199.2	200.3	201.2	200.3
42.5°	181.5	182.0	182.5	182.5	183.6	184.0	184.5	184.5
45°	165.7	166.7	167.2	167.8	168.3	169.3	168.7	169.8
47.5°	149.5	150.9	151.5	152.0	153.0	153.6	154.0	154.5
50°	134.7	135.8	135.8	136.7	138.3	138.3	139.3	139.8
52.5°	120.0	120.5	120.9	121.5	122.5	123.6	123.6	124.5
55°	105.8	106.2	106.2	106.7	107.3	109.3	109.8	109.8
57.5°	90.9	90.9	92.0	92.5	93.0	94.0	94.0	94.0
60°	76.7	77.3	77.3	77.8	78.3	79.3	79.8	79.3
62.5°	62.5	63.0	63.0	63.6	64.5	65.0	64.5	64.5
65°	49.4	49.8	49.8	50.3	51.4	51.4	50.8	51.4
67.5°	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
70°	22.8	22.3	21.9	22.3	22.3	22.3	21.9	22.8
72.5°	11.2	11.7	11.7	11.7	11.7	11.7	11.7	11.2
75°	5.1	5.1	4.5	4.5	4.5	5.1	5.1	4.5
77.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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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— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)