

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: P583600

Luminaire Tested: **HC807D010-HM80520835-81RWWC**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P583600
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-HM80520835-81RWWC
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WALLWASH DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 922.1 lumens
Efficiency: N/A
Efficacy: 115.3 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

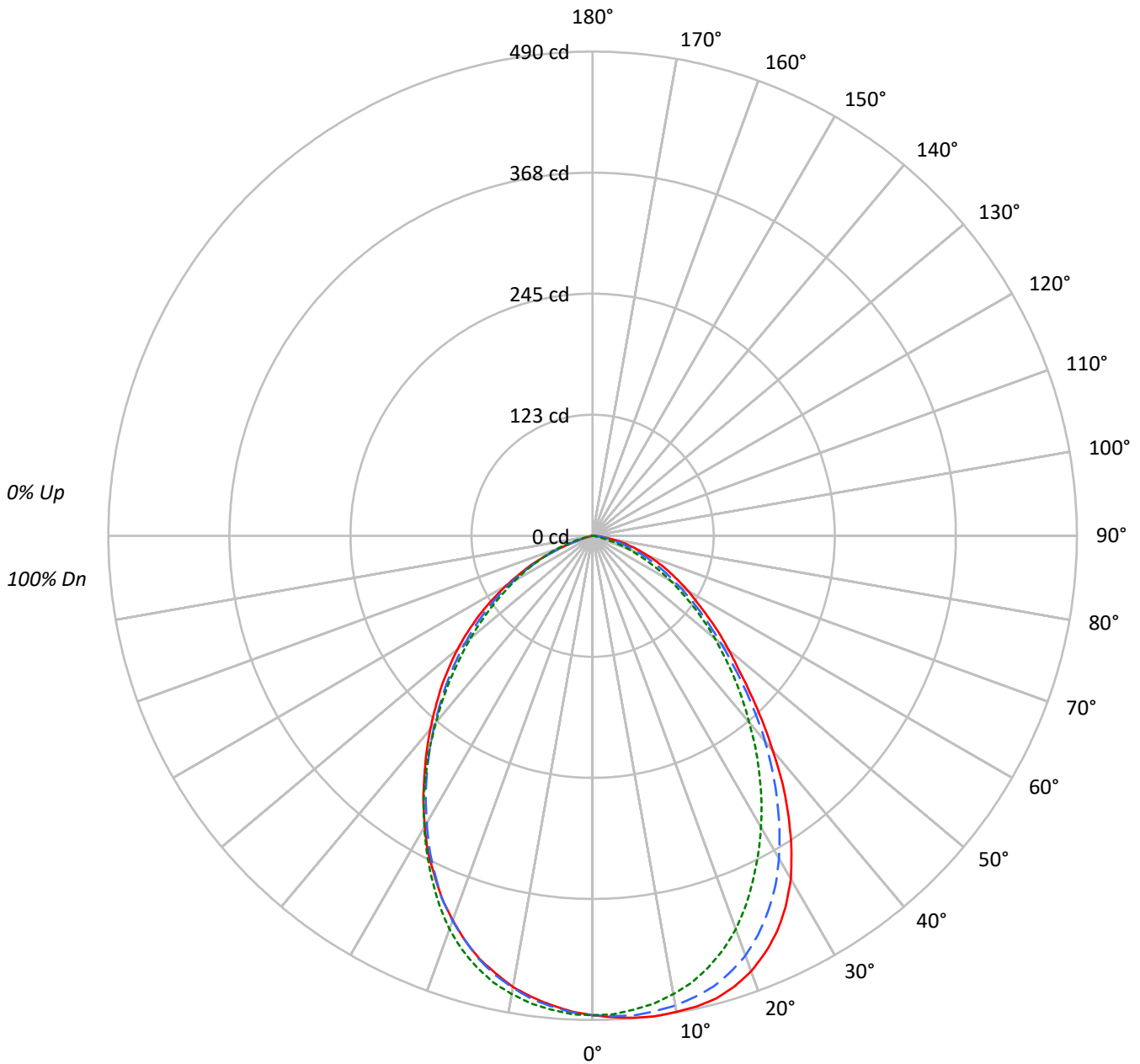
Input Watts (W): 8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	85	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°	14962	14962	14962
5°	15158	14898	14759
10°	15315	14745	14523
15°	15470	14436	14146
20°	15390	13901	13582
25°	15032	13072	12892
30°	14278	12131	12088
35°	12995	11071	11169
40°	11396	9911	10277
45°	9829	8813	9437
50°	8611	7738	8549
55°	7623	6650	7521
60°	6870	5594	6235
65°	6187	4487	4779
70°	5428	3273	2633
75°	4623	1692	703
80°	3569	462	107
85°	2300	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.8	5.0
10°-20°	128.7	14.0
20°-30°	182.7	19.8
30°-40°	192.3	20.9
40°-50°	163.6	17.7
50°-60°	118.2	12.8
60°-70°	67.2	7.3
70°-80°	21.2	2.3
80°-90°	2.6	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°	357.1	38.7
0°-40°	549.4	59.6
0°-60°	831.2	90.1
0°-90°	922.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	922.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	485	485	485	485	485	
5°	490	487	481	478	477	47
15°	485	472	452	444	443	136
25°	442	420	384	378	379	202
35°	345	325	294	292	297	215
45°	225	217	202	207	216	175
55°	142	132	124	131	140	128
65°	85	73	62	61	66	84
75°	39	30	14	6	6	42
85°	6	4	0	0	0	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°	485.2	485.2	485.2	485.2	485.2	485.2	485.2	485.2	485.2	485.2	485.2
2.5°	487.8	488.4	487.1	487.1	488.4	487.1	487.8	487.8	487.1	487.1	486.5
5°	489.7	489.1	489.1	489.1	489.7	488.4	487.8	488.4	487.1	487.1	487.1
7.5°	490.4	490.4	489.7	489.1	489.1	489.1	488.4	487.8	487.1	485.9	485.2
10°	489.1	489.1	489.7	488.4	488.4	487.1	487.1	485.9	485.9	484.6	482.7
12.5°	487.8	487.1	487.1	485.9	485.9	484.6	484.6	482.7	481.9	480.0	478.1
15°	484.6	483.9	482.7	481.9	481.3	480.6	479.3	478.7	476.8	474.2	472.3
17.5°	478.1	477.4	476.8	475.5	474.2	473.6	472.9	470.9	468.3	466.4	463.2
20°	469.0	468.3	468.3	466.4	465.8	463.8	463.2	460.6	458.6	454.7	452.2
22.5°	456.7	457.3	456.0	454.7	453.5	451.5	450.2	447.6	444.4	440.5	437.3
25°	441.8	442.4	441.2	439.9	437.8	436.7	435.3	431.4	428.2	423.6	419.8
27.5°	423.0	423.0	423.0	421.7	418.5	417.8	416.6	412.6	408.1	404.3	400.3
30°	401.0	400.3	400.3	398.4	397.1	394.5	392.6	389.3	386.1	381.6	377.0
32.5°	374.4	375.1	373.1	371.9	369.9	369.9	367.3	364.7	360.8	356.2	351.8
35°	345.2	346.0	344.6	343.9	340.7	340.1	339.5	336.2	333.6	330.4	325.2
37.5°	315.5	314.9	314.2	314.2	312.3	310.9	309.6	307.7	303.8	301.3	298.6
40°	283.1	283.1	283.1	282.4	281.8	280.5	279.9	278.6	275.9	273.4	271.4
42.5°	253.9	253.9	253.3	252.6	251.3	252.0	250.7	249.4	246.8	244.9	243.5
45°	225.4	225.4	225.4	226.1	224.8	222.9	222.9	221.6	220.2	218.9	217.0
47.5°	200.2	202.1	200.8	200.2	200.8	198.3	198.3	196.9	195.6	194.3	191.8
50°	179.5	179.5	179.5	178.2	177.5	177.5	175.5	174.2	173.6	172.3	169.7
52.5°	160.6	159.4	159.4	158.7	158.1	156.8	156.8	155.5	152.8	151.5	149.6
55°	141.8	141.8	141.2	140.5	139.9	139.2	138.6	136.7	135.4	133.5	131.5
57.5°	125.0	126.3	125.7	124.4	123.1	123.1	121.8	120.5	118.5	116.6	114.6
60°	111.4	110.8	110.8	110.2	108.9	108.1	107.6	105.6	103.6	101.7	99.8
62.5°	97.2	97.2	97.2	95.8	94.5	93.9	93.3	92.0	89.4	87.5	86.2
65°	84.8	84.2	83.5	82.9	82.2	81.0	80.3	79.0	77.1	75.2	73.3
67.5°	72.5	71.9	71.9	71.2	69.3	68.7	68.7	66.7	64.8	62.9	60.9
70°	60.2	60.2	60.2	58.9	58.3	57.6	57.0	55.7	53.8	51.9	49.8
72.5°	49.8	49.2	49.2	48.6	46.6	46.0	45.3	44.1	42.1	40.9	39.6
75°	38.8	38.8	38.2	37.5	36.9	36.3	35.6	34.3	32.4	30.5	29.8
77.5°	29.8	29.2	29.2	28.6	27.2	26.5	26.5	25.2	23.3	22.0	20.7
80°	20.1	20.7	20.1	19.5	18.8	18.2	17.4	16.8	15.5	14.2	12.9
82.5°	12.3	12.9	12.3	12.3	11.7	11.0	11.0	9.7	9.1	8.4	7.8
85°	6.5	6.5	6.5	6.5	5.9	5.9	5.9	5.1	4.5	3.9	3.9
87.5°	1.9	2.6	1.9	1.9	1.9	1.9	1.9	1.9	1.3	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°	485.2	485.2	485.2	485.2	485.2	485.2	485.2	485.2	485.2	485.2	485.2
2.5°	487.1	486.5	485.9	485.9	485.9	485.9	485.9	485.2	484.6	484.6	484.6
5°	485.9	485.9	485.9	485.2	484.6	484.6	483.3	482.7	481.9	481.3	480.6
7.5°	484.6	483.3	482.7	481.9	481.3	481.3	480.0	478.7	478.7	477.4	476.1
10°	480.6	480.0	478.7	477.4	476.8	476.1	474.8	472.9	472.3	470.9	469.6
12.5°	476.1	474.8	473.6	470.9	470.4	469.6	467.0	465.1	463.8	463.2	460.0
15°	470.4	467.7	465.8	462.5	461.9	460.6	458.6	456.7	454.1	452.2	450.9
17.5°	460.0	457.3	454.1	450.9	449.6	449.6	446.3	443.7	440.5	439.2	436.7
20°	447.6	444.4	441.8	437.8	435.9	434.0	432.1	428.2	425.5	423.6	420.4
22.5°	433.4	428.9	425.5	421.7	418.5	416.6	413.4	410.0	406.8	404.9	402.2
25°	415.3	411.3	406.2	402.2	400.3	397.7	393.9	390.6	387.4	384.2	382.9
27.5°	395.2	389.9	385.4	380.8	378.9	377.0	372.5	368.5	366.0	362.8	361.5
30°	373.1	367.9	362.8	358.9	356.9	353.7	351.1	346.6	343.3	340.7	337.5
32.5°	347.9	343.9	339.5	333.6	332.3	329.7	325.9	323.8	320.0	318.1	315.5
35°	320.6	318.1	313.6	309.0	307.0	305.8	302.6	298.6	296.0	294.1	292.8
37.5°	294.7	291.5	286.9	283.7	282.4	280.5	276.6	274.6	272.1	270.8	268.2
40°	266.8	263.6	260.4	258.5	256.6	255.3	252.6	250.7	248.1	246.2	245.6
42.5°	239.7	237.7	235.2	232.5	231.9	229.9	228.7	226.7	224.8	224.2	222.2
45°	215.1	213.1	210.6	207.9	207.3	206.0	205.3	203.4	202.1	202.1	202.1
47.5°	190.5	188.5	185.9	184.6	185.2	182.7	182.7	182.0	180.7	180.7	181.4
50°	168.4	165.9	165.1	163.8	162.6	161.3	161.9	160.0	160.0	161.3	160.6
52.5°	147.7	145.1	144.5	143.2	142.6	142.6	141.8	141.8	141.2	141.8	141.8
55°	128.9	126.9	125.7	124.4	123.7	123.7	123.7	123.1	122.5	123.7	124.4
57.5°	112.1	111.4	110.2	108.1	107.6	106.8	106.2	106.2	106.2	106.2	106.8
60°	97.2	95.8	94.5	92.6	92.6	92.0	91.3	90.7	90.7	90.7	90.7
62.5°	84.2	82.2	80.3	79.0	78.4	77.8	77.1	75.8	75.8	75.8	75.8
65°	71.2	69.3	68.0	66.7	65.5	65.5	64.2	63.5	62.1	61.5	60.2
67.5°	58.9	57.6	56.4	54.4	53.8	53.2	51.9	51.1	49.2	48.6	47.9
70°	47.9	46.0	44.7	43.4	42.8	41.5	40.2	38.8	37.5	36.3	35.0
72.5°	37.5	35.6	34.3	33.0	31.8	31.8	29.8	28.6	26.5	25.2	23.3
75°	27.8	25.9	24.6	22.7	22.0	21.4	19.5	18.2	16.3	14.2	12.9
77.5°	18.8	17.4	16.3	14.2	12.9	12.9	11.0	9.7	8.4	6.5	5.9
80°	11.7	10.4	9.1	7.8	7.8	6.5	5.9	4.5	3.2	2.6	1.9
82.5°	6.5	5.9	5.1	3.9	3.9	3.2	2.6	1.9	1.3	0.6	0.6
85°	3.2	2.6	1.9	1.9	1.3	1.3	1.3	0.6	0.6	0.0	0.0
87.5°	1.3	0.6	0.6	0.6	0.6	0.6	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°	485.2	485.2	485.2	485.2	485.2	485.2	485.2	485.2	485.2	485.2	485.2
2.5°	483.9	483.9	483.3	483.3	483.3	482.7	483.3	482.7	482.7	482.7	483.3
5°	481.3	480.0	480.0	479.3	479.3	478.7	479.3	478.7	478.1	477.4	478.1
7.5°	476.1	474.8	474.2	473.6	473.6	473.6	472.9	472.3	472.9	470.9	472.3
10°	469.0	468.3	467.0	466.4	465.8	466.4	465.8	464.5	464.5	464.5	463.8
12.5°	460.0	458.6	458.0	457.3	456.0	456.0	456.7	455.4	455.4	454.1	454.1
15°	449.0	447.6	446.3	446.3	445.0	445.0	444.4	444.4	443.7	443.1	443.1
17.5°	435.3	433.4	432.1	432.7	432.1	431.4	431.4	430.1	429.5	430.1	430.1
20°	419.1	417.8	416.6	417.2	415.9	415.3	415.9	413.9	414.5	414.5	414.5
22.5°	401.0	400.3	398.4	398.4	397.1	396.5	397.1	397.1	397.7	397.1	397.1
25°	380.8	379.7	378.3	378.3	377.6	377.0	377.6	378.3	377.6	378.3	378.3
27.5°	359.6	357.5	357.5	356.2	356.2	356.9	356.2	356.9	357.5	357.5	358.9
30°	336.2	335.6	335.0	334.2	334.2	335.0	335.0	335.0	335.6	336.9	336.9
32.5°	314.2	312.9	311.5	311.5	312.9	312.3	312.9	312.9	314.2	314.2	315.5
35°	290.3	290.3	289.0	289.5	289.5	289.5	289.5	290.9	292.2	292.8	294.1
37.5°	268.2	266.2	266.8	266.8	267.6	266.8	268.9	268.9	270.1	270.1	271.4
40°	244.3	244.3	244.9	244.3	244.9	244.9	246.2	247.5	248.1	249.4	250.0
42.5°	221.6	222.9	221.6	222.2	222.9	223.5	224.2	224.8	227.4	228.7	230.6
45°	200.8	201.5	202.1	202.8	202.1	203.4	204.1	205.3	207.3	207.9	208.6
47.5°	180.7	181.4	182.0	182.7	182.7	184.0	184.6	185.9	187.3	187.9	188.5
50°	161.3	162.6	163.2	163.2	163.8	165.1	166.5	166.5	167.8	169.7	170.4
52.5°	143.8	143.8	145.1	145.8	146.4	146.4	148.3	149.0	149.6	150.9	152.2
55°	124.4	126.3	126.9	126.9	128.2	129.5	130.3	130.9	130.9	133.5	133.5
57.5°	107.6	108.1	109.5	109.5	109.5	111.4	111.4	112.7	113.4	114.0	115.3
60°	90.7	92.0	92.0	92.6	92.0	93.3	93.9	95.2	95.8	96.6	97.2
62.5°	75.2	75.2	75.8	75.8	75.8	75.8	77.1	77.1	78.4	79.0	79.7
65°	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.9	60.9	62.1
67.5°	46.6	46.0	44.7	45.3	44.7	44.7	44.1	44.1	44.7	44.7	46.0
70°	33.7	33.0	31.8	31.8	31.1	30.5	29.8	29.2	28.6	28.6	28.6
72.5°	22.0	20.7	18.8	18.2	18.2	16.8	15.5	14.9	14.9	14.9	14.9
75°	11.0	9.7	8.4	7.8	7.8	6.5	7.2	6.5	6.5	6.5	6.5
77.5°	4.5	3.2	2.6	2.6	2.6	1.9	1.9	1.9	1.9	1.9	1.9
80°	1.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
82.5°	0.6	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-HM80520835-81RWWC

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	485.2	485.2	485.2	485.2	485.2	485.2	485.2	485.2
2.5°	482.7	482.7	481.3	481.9	481.9	481.9	481.9	481.9
5°	476.8	477.4	476.8	477.4	477.4	476.8	476.8	476.8
7.5°	470.9	471.5	470.9	471.5	471.5	471.5	470.9	470.9
10°	463.8	463.8	463.8	463.8	463.8	463.2	463.8	463.8
12.5°	454.1	454.1	454.1	454.7	454.7	454.1	454.1	453.5
15°	443.7	442.4	443.1	443.7	443.1	443.1	443.1	443.1
17.5°	429.5	430.1	429.5	429.5	429.5	429.5	430.1	429.5
20°	414.5	414.5	415.3	414.5	414.5	414.5	414.5	413.9
22.5°	397.7	397.1	397.1	397.7	397.7	397.1	397.7	397.7
25°	378.9	379.7	378.9	378.9	379.7	379.7	379.7	378.9
27.5°	358.9	359.6	360.2	359.6	359.6	359.6	360.2	360.8
30°	338.2	339.5	338.2	338.2	339.5	338.8	339.5	339.5
32.5°	316.1	318.1	316.8	318.1	318.1	318.7	318.1	318.7
35°	294.1	296.0	296.0	296.0	296.7	297.3	297.3	296.7
37.5°	273.4	274.0	274.0	275.3	275.9	276.6	276.6	275.9
40°	252.0	253.3	253.9	253.9	253.9	255.3	256.6	255.3
42.5°	231.2	231.9	232.5	232.5	233.9	234.5	235.2	235.2
45°	211.2	212.5	213.1	213.8	214.4	215.7	215.1	216.4
47.5°	190.5	192.4	193.0	193.7	195.0	195.6	196.3	196.9
50°	171.7	172.9	172.9	174.2	176.1	176.1	177.5	178.2
52.5°	152.8	153.6	154.2	154.9	156.1	157.4	157.4	158.7
55°	134.8	135.4	135.4	136.0	136.7	139.2	139.9	139.9
57.5°	115.9	115.9	117.2	117.9	118.5	119.9	119.9	119.9
60°	97.9	98.5	98.5	99.1	99.8	101.1	101.7	101.1
62.5°	79.7	80.3	80.3	81.0	82.2	82.9	82.2	82.2
65°	62.9	63.5	63.5	64.2	65.5	65.5	64.8	65.5
67.5°	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0
70°	29.2	28.6	27.8	28.6	28.6	28.6	27.8	29.2
72.5°	14.2	14.9	14.9	14.9	14.9	14.9	14.9	14.2
75°	6.5	6.5	5.9	5.9	5.9	6.5	6.5	5.9
77.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
80°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
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)