

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: P583464

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

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P583464
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: HC805D010-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: 698.9 lumens
Efficiency: N/A
Efficacy: 116.5 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

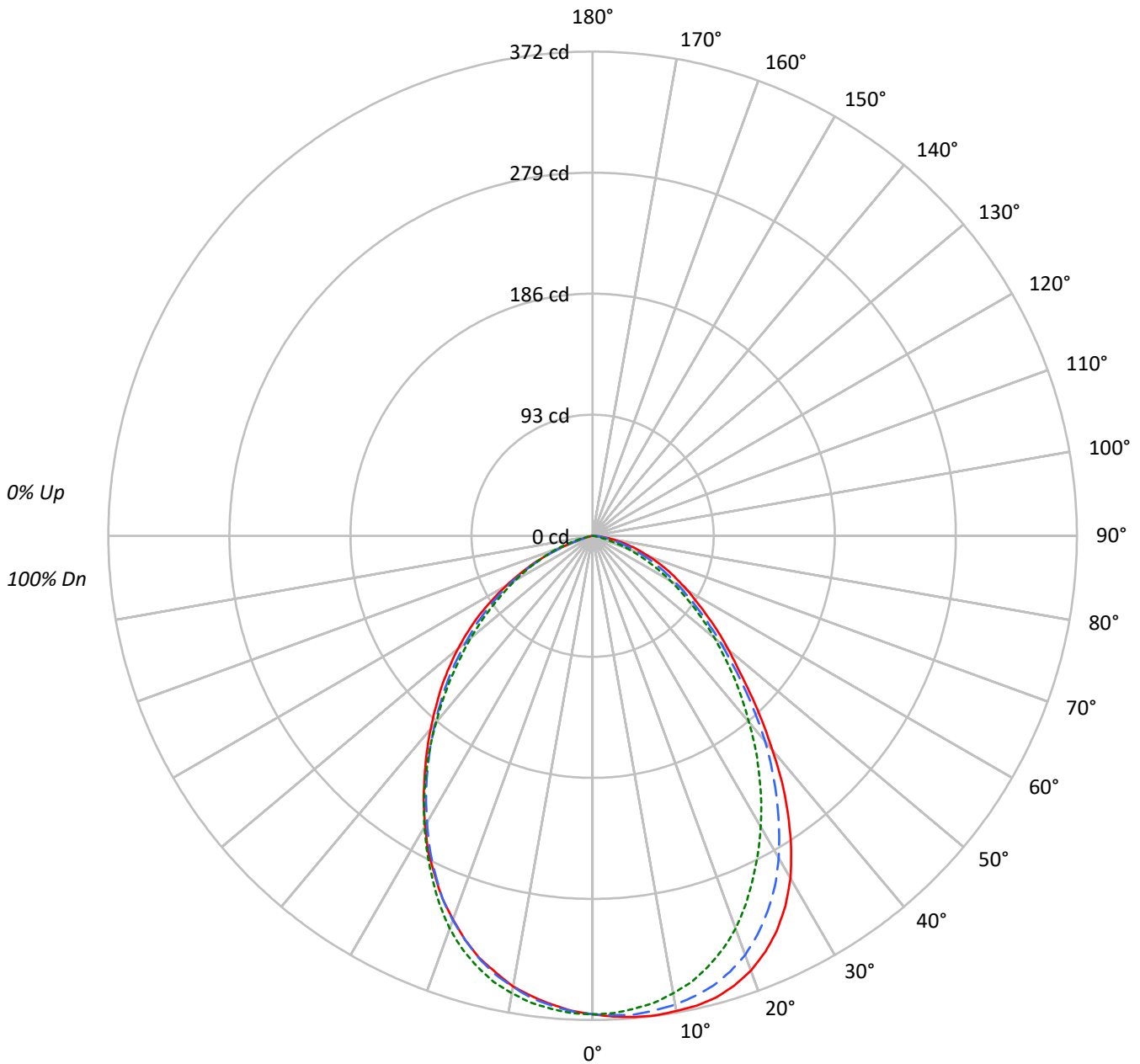
Input Watts (W): 6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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°	11339	11339	11339
5°	11490	11292	11187
10°	11607	11175	11009
15°	11723	10940	10723
20°	11666	10540	10294
25°	11391	9904	9775
30°	10821	9197	9158
35°	9851	8391	8466
40°	8634	7511	7785
45°	7448	6681	7152
50°	6524	5862	6476
55°	5779	5037	5704
60°	5211	4237	4724
65°	4692	3407	3619
70°	4111	2479	1993
75°	3503	1287	524
80°	2699	337	89
85°	1734	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.7	5.0
10°-20°	97.5	14.0
20°-30°	138.4	19.8
30°-40°	145.7	20.9
40°-50°	124.0	17.7
50°-60°	89.6	12.8
60°-70°	50.9	7.3
70°-80°	16.0	2.3
80°-90°	1.9	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°	270.7	38.7
0°-40°	416.4	59.6
0°-60°	630.0	90.1
0°-90°	698.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	698.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	368	368	368	368	368	
5°	371	369	365	362	361	35
15°	367	358	343	336	336	103
25°	335	318	291	286	287	153
35°	262	246	223	221	225	163
45°	171	164	153	157	164	133
55°	108	100	94	99	106	97
65°	64	56	47	46	50	64
75°	29	23	11	5	4	32
85°	5	3	0	0	0	6
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°	367.7	367.7	367.7	367.7	367.7	367.7	367.7	367.7	367.7	367.7	367.7
2.5°	369.8	370.2	369.3	369.3	370.2	369.3	369.8	369.8	369.3	369.3	368.7
5°	371.2	370.7	370.7	370.7	371.2	370.2	369.8	370.2	369.3	369.3	369.3
7.5°	371.7	371.7	371.2	370.7	370.7	370.7	370.2	369.8	369.3	368.2	367.7
10°	370.7	370.7	371.2	370.2	370.2	369.3	369.3	368.2	368.2	367.2	365.8
12.5°	369.8	369.3	369.3	368.2	368.2	367.2	367.2	365.8	365.3	363.8	362.3
15°	367.2	366.8	365.8	365.3	364.8	364.4	363.3	362.8	361.4	359.5	357.9
17.5°	362.3	361.9	361.4	360.4	359.5	358.9	358.4	356.9	355.0	353.5	351.1
20°	355.5	355.0	355.0	353.5	353.0	351.6	351.1	349.0	347.6	344.6	342.7
22.5°	346.2	346.7	345.7	344.6	343.7	342.2	341.3	339.2	336.8	333.8	331.4
25°	334.8	335.4	334.3	333.4	331.9	331.0	329.9	327.0	324.5	321.2	318.2
27.5°	320.6	320.6	320.6	319.6	317.2	316.7	315.6	312.8	309.3	306.4	303.4
30°	303.9	303.4	303.4	302.0	300.9	299.0	297.6	295.1	292.7	289.2	285.7
32.5°	283.8	284.3	282.9	281.8	280.3	280.3	278.4	276.4	273.5	270.0	266.6
35°	261.7	262.1	261.2	260.7	258.3	257.7	257.2	254.8	252.8	250.4	246.5
37.5°	239.2	238.6	238.1	238.1	236.6	235.7	234.7	233.2	230.3	228.3	226.4
40°	214.5	214.5	214.5	214.0	213.5	212.6	212.1	211.2	209.1	207.2	205.8
42.5°	192.5	192.5	192.0	191.5	190.6	191.0	190.0	189.0	187.1	185.5	184.6
45°	170.8	170.8	170.8	171.4	170.3	168.9	168.9	167.9	167.0	165.9	164.5
47.5°	151.7	153.2	152.3	151.7	152.3	150.2	150.2	149.3	148.3	147.4	145.3
50°	136.0	136.0	136.0	135.0	134.5	134.5	133.1	132.0	131.6	130.6	128.7
52.5°	121.7	120.8	120.8	120.3	119.8	118.9	118.9	117.8	115.9	114.9	113.5
55°	107.5	107.5	107.0	106.5	106.1	105.6	105.1	103.5	102.6	101.1	99.7
57.5°	94.8	95.8	95.3	94.3	93.2	93.2	92.3	91.3	89.9	88.3	86.9
60°	84.5	83.9	83.9	83.4	82.5	82.0	81.5	80.1	78.5	77.1	75.7
62.5°	73.6	73.6	73.6	72.7	71.7	71.2	70.7	69.7	67.8	66.3	65.4
65°	64.3	63.8	63.3	62.8	62.4	61.4	60.9	59.8	58.4	57.0	55.5
67.5°	54.9	54.5	54.5	54.0	52.5	52.1	52.1	50.5	49.1	47.6	46.2
70°	45.6	45.6	45.6	44.6	44.2	43.7	43.2	42.3	40.7	39.3	37.8
72.5°	37.8	37.3	37.3	36.9	35.3	34.8	34.4	33.4	32.0	30.9	29.9
75°	29.4	29.4	29.0	28.5	28.0	27.5	27.1	26.0	24.5	23.1	22.6
77.5°	22.6	22.1	22.1	21.5	20.6	20.1	20.1	19.2	17.7	16.6	15.7
80°	15.2	15.7	15.2	14.7	14.2	13.8	13.3	12.8	11.7	10.8	9.8
82.5°	9.3	9.8	9.3	9.3	8.9	8.4	8.4	7.4	6.8	6.3	5.9
85°	4.9	4.9	4.9	4.9	4.4	4.4	4.4	4.0	3.5	3.0	3.0
87.5°	1.4	1.9	1.4	1.4	1.4	1.4	1.4	1.4	1.0	1.0	1.0
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	367.7	367.7	367.7	367.7	367.7	367.7	367.7	367.7	367.7	367.7	367.7
2.5°	369.3	368.7	368.2	368.2	368.2	368.2	368.2	367.7	367.2	367.2	367.2
5°	368.2	368.2	368.2	367.7	367.2	367.2	366.3	365.8	365.3	364.8	364.4
7.5°	367.2	366.3	365.8	365.3	364.8	364.8	363.8	362.8	362.8	361.9	360.9
10°	364.4	363.8	362.8	361.9	361.4	360.9	359.9	358.4	357.9	356.9	356.0
12.5°	360.9	359.9	358.9	356.9	356.5	356.0	354.0	352.5	351.6	351.1	348.6
15°	356.5	354.6	353.0	350.6	350.1	349.0	347.6	346.2	344.1	342.7	341.7
17.5°	348.6	346.7	344.1	341.7	340.8	340.8	338.3	336.4	333.8	332.9	331.0
20°	339.2	336.8	334.8	331.9	330.5	328.9	327.5	324.5	322.6	321.2	318.6
22.5°	328.5	325.0	322.6	319.6	317.2	315.6	313.3	310.7	308.3	306.9	304.9
25°	314.7	311.8	307.9	304.9	303.4	301.5	298.5	296.0	293.6	291.1	290.2
27.5°	299.5	295.5	292.2	288.7	287.3	285.7	282.4	279.4	277.5	275.0	274.0
30°	282.9	278.9	275.0	272.0	270.5	268.1	266.1	262.6	260.2	258.3	255.8
32.5°	263.7	260.7	257.2	252.8	251.8	249.9	246.9	245.5	242.5	241.1	239.2
35°	243.0	241.1	237.6	234.3	232.7	231.7	229.3	226.4	224.4	222.9	221.9
37.5°	223.4	221.0	217.5	215.1	214.0	212.6	209.6	208.2	206.2	205.3	203.3
40°	202.3	199.8	197.4	195.9	194.4	193.4	191.5	190.0	188.0	186.6	186.1
42.5°	181.7	180.1	178.2	176.3	175.7	174.3	173.3	171.9	170.3	169.9	168.4
45°	163.0	161.5	159.6	157.6	157.2	156.1	155.6	154.2	153.2	153.2	153.2
47.5°	144.4	142.9	140.9	139.9	140.4	138.5	138.5	138.0	136.9	136.9	137.5
50°	127.6	125.7	125.2	124.2	123.3	122.2	122.7	121.3	121.3	122.2	121.7
52.5°	111.9	110.0	109.5	108.4	108.0	108.0	107.5	107.5	107.0	107.5	107.5
55°	97.7	96.2	95.3	94.3	93.7	93.7	93.7	93.2	92.8	93.7	94.3
57.5°	85.0	84.5	83.4	82.0	81.5	81.0	80.6	80.6	80.6	80.6	81.0
60°	73.6	72.7	71.7	70.3	70.3	69.7	69.2	68.7	68.7	68.7	68.7
62.5°	63.8	62.4	60.9	59.8	59.4	58.9	58.4	57.5	57.5	57.5	57.5
65°	54.0	52.5	51.6	50.5	49.6	49.6	48.6	48.1	47.2	46.7	45.6
67.5°	44.6	43.7	42.7	41.3	40.7	40.2	39.3	38.8	37.3	36.9	36.4
70°	36.4	34.8	33.9	32.9	32.4	31.5	30.4	29.4	28.5	27.5	26.5
72.5°	28.5	27.1	26.0	25.0	24.1	24.1	22.6	21.5	20.1	19.2	17.7
75°	21.1	19.6	18.7	17.2	16.6	16.2	14.7	13.8	12.3	10.8	9.8
77.5°	14.2	13.3	12.3	10.8	9.8	9.8	8.4	7.4	6.3	4.9	4.4
80°	8.9	7.9	6.8	5.9	5.9	4.9	4.4	3.5	2.5	1.9	1.4
82.5°	4.9	4.4	4.0	3.0	3.0	2.5	1.9	1.4	1.0	0.5	0.5
85°	2.5	1.9	1.4	1.4	1.0	1.0	1.0	0.5	0.5	0.0	0.0
87.5°	1.0	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°	367.7	367.7	367.7	367.7	367.7	367.7	367.7	367.7	367.7	367.7	367.7
2.5°	366.8	366.8	366.3	366.3	366.3	365.8	366.3	365.8	365.8	365.8	366.3
5°	364.8	363.8	363.8	363.3	363.3	362.8	363.3	362.8	362.3	361.9	362.3
7.5°	360.9	359.9	359.5	358.9	358.9	358.9	358.4	357.9	358.4	356.9	357.9
10°	355.5	355.0	354.0	353.5	353.0	353.5	353.0	352.0	352.0	352.0	351.6
12.5°	348.6	347.6	347.1	346.7	345.7	345.7	346.2	345.2	345.2	344.1	344.1
15°	340.3	339.2	338.3	338.3	337.3	337.3	336.8	336.8	336.4	335.9	335.9
17.5°	329.9	328.5	327.5	328.0	327.5	327.0	327.0	326.1	325.5	326.1	326.1
20°	317.7	316.7	315.6	316.2	315.2	314.7	315.2	313.7	314.2	314.2	314.2
22.5°	303.9	303.4	302.0	302.0	300.9	300.4	300.9	300.9	301.5	300.9	300.9
25°	288.7	287.8	286.7	286.7	286.2	285.7	286.2	286.7	286.2	286.7	286.7
27.5°	272.6	271.0	271.0	270.0	270.0	270.5	270.0	270.5	271.0	271.0	272.0
30°	254.8	254.4	253.9	253.4	253.4	253.9	253.9	253.9	254.4	255.3	255.3
32.5°	238.1	237.1	236.2	236.2	237.1	236.6	237.1	237.1	238.1	238.1	239.2
35°	220.0	220.0	218.9	219.5	219.5	219.5	219.5	220.5	221.4	221.9	222.9
37.5°	203.3	201.8	202.3	202.3	202.8	202.3	203.7	203.7	204.7	204.7	205.8
40°	185.1	185.1	185.5	185.1	185.5	185.5	186.6	187.6	188.0	189.0	189.5
42.5°	167.9	168.9	167.9	168.4	168.9	169.4	169.9	170.3	172.4	173.3	174.8
45°	152.3	152.7	153.2	153.7	153.2	154.2	154.7	155.6	157.2	157.6	158.1
47.5°	136.9	137.5	138.0	138.5	138.5	139.5	139.9	140.9	141.8	142.4	142.9
50°	122.2	123.3	123.8	123.8	124.2	125.2	126.2	126.2	127.1	128.7	129.2
52.5°	109.0	109.0	110.0	110.5	111.0	111.0	112.4	112.9	113.5	114.4	115.4
55°	94.3	95.8	96.2	96.2	97.2	98.2	98.6	99.2	99.2	101.1	101.1
57.5°	81.5	82.0	83.0	83.0	83.0	84.5	84.5	85.5	85.9	86.4	87.4
60°	68.7	69.7	69.7	70.3	69.7	70.7	71.2	72.2	72.7	73.1	73.6
62.5°	57.0	57.0	57.5	57.5	57.5	57.5	58.4	58.4	59.4	59.8	60.4
65°	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	46.2	46.2	47.2
67.5°	35.3	34.8	33.9	34.4	33.9	33.9	33.4	33.4	33.9	33.9	34.8
70°	25.5	25.0	24.1	24.1	23.6	23.1	22.6	22.1	21.5	21.5	21.5
72.5°	16.6	15.7	14.2	13.8	13.8	12.8	11.7	11.3	11.3	11.3	11.3
75°	8.4	7.4	6.3	5.9	5.9	4.9	5.4	4.9	4.9	4.9	4.9
77.5°	3.5	2.5	1.9	1.9	1.9	1.4	1.4	1.4	1.4	1.4	1.4
80°	1.0	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



TEST NUMBER: P583464

CATALOG NUMBER: HC805D010-HM80520835-81RWWC

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	367.7	367.7	367.7	367.7	367.7	367.7	367.7	367.7
2.5°	365.8	365.8	364.8	365.3	365.3	365.3	365.3	365.3
5°	361.4	361.9	361.4	361.9	361.9	361.4	361.4	361.4
7.5°	356.9	357.4	356.9	357.4	357.4	357.4	356.9	356.9
10°	351.6	351.6	351.6	351.6	351.6	351.1	351.6	351.6
12.5°	344.1	344.1	344.1	344.6	344.6	344.1	344.1	343.7
15°	336.4	335.4	335.9	336.4	335.9	335.9	335.9	335.9
17.5°	325.5	326.1	325.5	325.5	325.5	325.5	326.1	325.5
20°	314.2	314.2	314.7	314.2	314.2	314.2	314.2	313.7
22.5°	301.5	300.9	300.9	301.5	301.5	300.9	301.5	301.5
25°	287.3	287.8	287.3	287.3	287.8	287.8	287.8	287.3
27.5°	272.0	272.6	273.0	272.6	272.6	272.6	273.0	273.5
30°	256.3	257.2	256.3	256.3	257.2	256.8	257.2	257.2
32.5°	239.6	241.1	240.1	241.1	241.1	241.6	241.1	241.6
35°	222.9	224.4	224.4	224.4	224.9	225.4	225.4	224.9
37.5°	207.2	207.7	207.7	208.6	209.1	209.6	209.6	209.1
40°	191.0	192.0	192.5	192.5	192.5	193.4	194.4	193.4
42.5°	175.2	175.7	176.3	176.3	177.3	177.8	178.2	178.2
45°	160.0	161.0	161.5	162.1	162.6	163.5	163.0	164.0
47.5°	144.4	145.8	146.3	146.8	147.8	148.3	148.8	149.3
50°	130.1	131.1	131.1	132.0	133.6	133.6	134.5	135.0
52.5°	115.9	116.3	116.8	117.3	118.4	119.3	119.3	120.3
55°	102.1	102.6	102.6	103.1	103.5	105.6	106.1	106.1
57.5°	87.9	87.9	88.8	89.4	89.9	90.9	90.9	90.9
60°	74.1	74.6	74.6	75.2	75.7	76.6	77.1	76.6
62.5°	60.4	60.9	60.9	61.4	62.4	62.8	62.4	62.4
65°	47.6	48.1	48.1	48.6	49.6	49.6	49.1	49.6
67.5°	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8
70°	22.1	21.5	21.1	21.5	21.5	21.5	21.1	22.1
72.5°	10.8	11.3	11.3	11.3	11.3	11.3	11.3	10.8
75°	4.9	4.9	4.4	4.4	4.4	4.9	4.9	4.4
77.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
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)