

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: P583438

Luminaire Tested: **HC805D010-HM80520827-81WWW**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P583438
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-HM80520827-81WWW
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WALLWASH DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 645.1 lumens
Efficiency: N/A
Efficacy: 107.5 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

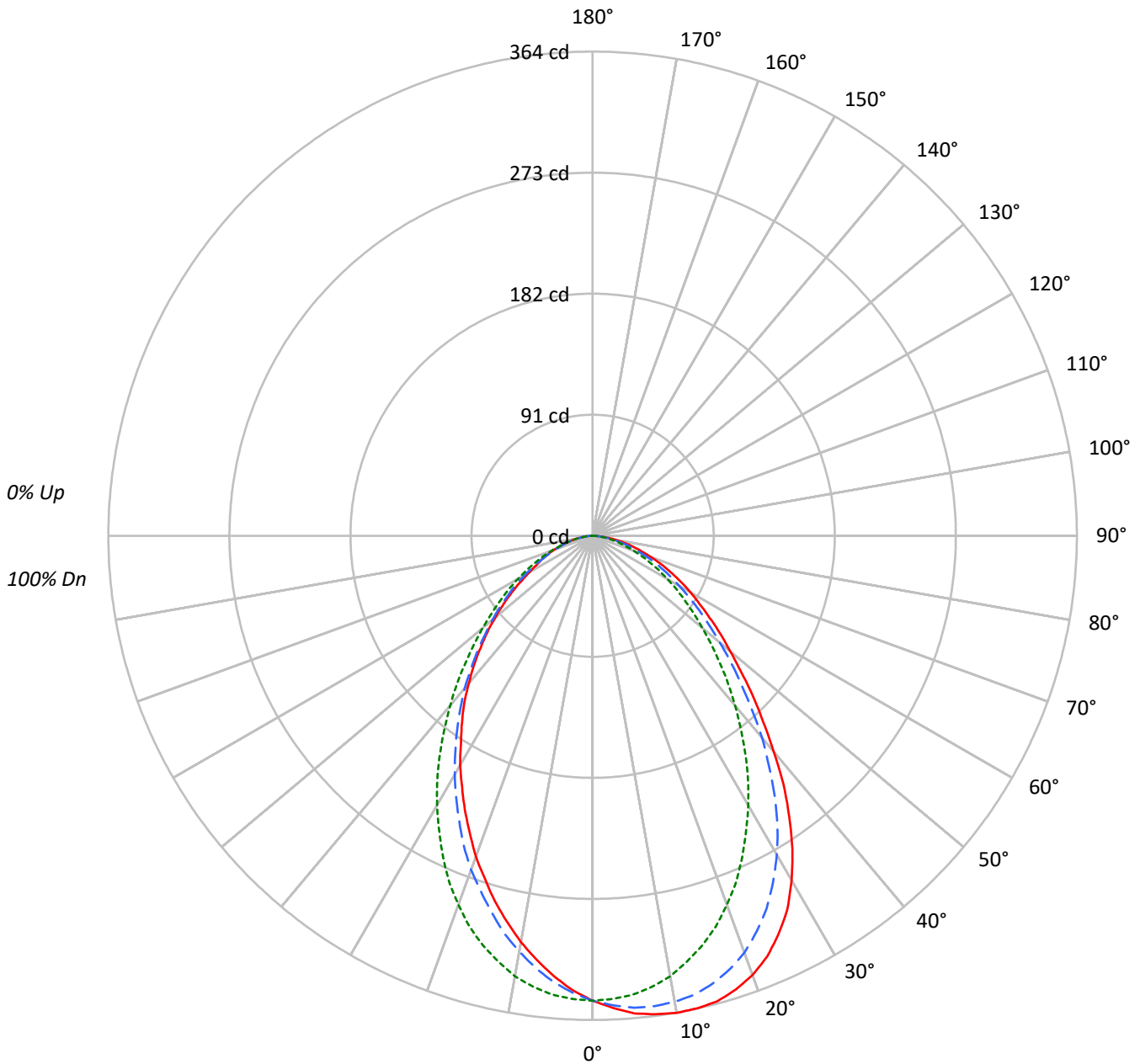
Input Watts (W): 6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P583438

CATALOG NUMBER: HC805D010-HM80520827-81WWW

Luminous Intensity Polar Plot





TEST NUMBER: P583438

CATALOG NUMBER: HC805D010-HM80520827-81WWW

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	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°	10777	10777	10777
5°	11156	10719	10292
10°	11404	10527	9710
15°	11566	10177	9073
20°	11531	9684	8420
25°	11248	9054	7730
30°	10654	8328	7093
35°	9697	7533	6445
40°	8514	6702	5825
45°	7427	5892	5194
50°	6462	5162	4572
55°	5769	4537	3978
60°	5236	3978	3398
65°	4706	3459	3086
70°	4183	2948	2786
75°	3681	2478	2371
80°	3125	2024	2113
85°	2335	1521	1698



TEST NUMBER: P583438

CATALOG NUMBER: HC805D010-HM80520827-81WWW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.7	5.1
10°-20°	90.2	14.0
20°-30°	125.2	19.4
30°-40°	129.5	20.1
40°-50°	108.4	16.8
50°-60°	78.7	12.2
60°-70°	49.7	7.7
70°-80°	24.6	3.8
80°-90°	6.1	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°	248.2	38.5
0°-40°	377.6	58.5
0°-60°	564.8	87.5
0°-90°	645.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	645.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	350	350	350	350	350	
5°	360	356	346	337	332	34
15°	362	349	319	293	284	102
25°	331	309	266	237	227	151
35°	258	239	200	177	171	160
45°	170	158	135	122	119	132
55°	107	98	84	77	74	97
65°	64	56	47	42	42	64
75°	31	26	21	20	20	33
85°	7	5	4	5	5	8
90°	0	0	0	0	0	



TEST NUMBER: P583438

CATALOG NUMBER: HC805D010-HM80520827-81WWW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	349.5	349.5	349.5	349.5	349.5	349.5	349.5	349.5	349.5	349.5	349.5
2.5°	355.3	355.3	355.7	355.3	355.3	355.3	354.8	354.8	354.3	354.3	353.4
5°	360.4	359.6	360.4	359.6	359.6	359.6	359.1	358.1	357.7	356.7	356.2
7.5°	362.8	362.3	362.3	361.9	361.9	361.4	360.9	360.4	358.6	358.1	356.7
10°	364.2	363.8	363.8	363.3	362.3	362.3	361.4	360.9	358.6	357.7	355.7
12.5°	363.8	363.8	363.8	363.3	361.9	361.4	360.4	359.1	357.2	355.3	353.4
15°	362.3	362.3	361.4	360.9	359.6	358.6	358.1	355.7	353.8	351.4	348.6
17.5°	357.7	357.7	357.2	356.2	354.8	353.8	352.9	350.5	348.6	344.9	342.0
20°	351.4	351.0	350.5	349.0	347.7	347.2	345.8	342.5	340.1	337.2	333.5
22.5°	342.5	342.0	341.5	340.5	338.2	337.2	336.2	334.0	329.7	326.8	322.1
25°	330.6	330.6	329.7	328.2	325.8	324.9	323.4	321.2	317.3	313.0	309.3
27.5°	316.8	316.4	314.9	314.0	312.1	310.6	308.3	305.5	301.6	298.3	293.6
30°	299.2	299.2	298.3	297.0	294.6	293.6	291.7	288.4	284.5	280.3	277.0
32.5°	279.4	279.4	277.9	277.0	275.5	273.2	272.7	269.0	265.6	262.3	258.6
35°	257.6	258.1	257.1	255.2	252.8	252.8	251.8	248.5	244.8	241.4	238.6
37.5°	235.7	234.3	233.9	232.9	231.5	229.6	228.6	227.2	223.8	221.4	217.3
40°	211.5	212.0	211.0	210.1	209.6	208.3	207.8	205.4	203.0	200.1	198.2
42.5°	189.7	189.7	189.7	188.8	187.8	186.4	185.9	184.5	181.7	179.8	176.9
45°	170.3	168.9	168.9	168.4	167.9	167.0	165.5	164.6	162.7	161.2	158.0
47.5°	151.3	151.8	151.3	150.8	149.4	148.9	148.4	146.5	144.7	143.3	140.9
50°	134.7	135.6	134.7	134.7	133.7	133.2	132.4	131.0	129.5	127.1	124.7
52.5°	120.9	120.9	120.4	120.1	118.6	117.7	117.2	116.7	114.3	112.4	110.5
55°	107.3	107.6	107.6	106.3	105.8	104.9	104.4	102.9	102.0	99.1	97.7
57.5°	95.3	94.8	95.3	94.4	93.5	92.5	92.0	91.1	89.7	87.7	85.8
60°	84.9	83.9	83.9	83.4	82.5	82.1	81.2	79.7	78.3	76.4	74.9
62.5°	74.5	74.0	73.5	73.0	72.1	71.6	71.1	69.7	68.3	66.9	65.5
65°	64.5	64.5	64.0	63.1	62.6	62.1	61.6	60.7	58.8	57.8	56.5
67.5°	55.5	55.1	55.1	54.1	53.1	52.7	52.7	51.7	50.3	48.8	47.9
70°	46.4	46.9	46.4	46.0	45.0	45.0	44.2	43.7	41.8	41.3	39.9
72.5°	38.4	38.4	37.9	37.9	37.0	36.5	36.5	35.6	34.6	33.6	32.7
75°	30.9	30.9	30.9	30.4	29.9	29.0	29.0	28.5	27.5	26.6	25.6
77.5°	24.2	23.7	23.7	23.2	22.7	22.3	22.3	21.8	20.8	20.3	19.4
80°	17.6	17.1	17.1	17.1	16.2	16.6	16.2	15.7	15.2	14.7	14.2
82.5°	11.4	11.9	11.9	11.4	10.9	10.9	10.9	10.4	10.4	9.9	9.5
85°	6.6	6.6	6.6	6.6	6.2	6.2	6.2	5.7	5.7	5.7	5.3
87.5°	2.9	2.9	2.9	2.9	2.9	2.9	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



TEST NUMBER: P583438

CATALOG NUMBER: HC805D010-HM80520827-81WWW

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	349.5	349.5	349.5	349.5	349.5	349.5	349.5	349.5	349.5	349.5	349.5
2.5°	353.4	352.4	351.9	351.4	351.4	351.0	350.5	349.5	349.5	348.6	348.1
5°	355.3	353.8	352.9	351.9	351.4	350.5	349.5	348.1	347.7	346.3	344.9
7.5°	355.7	353.4	352.4	350.5	349.5	348.6	346.8	345.3	343.4	342.0	340.1
10°	353.8	351.9	349.5	347.2	346.8	345.3	342.5	340.5	338.2	336.2	333.5
12.5°	351.0	348.1	345.8	342.9	341.5	340.1	337.2	334.4	331.1	327.7	324.9
15°	346.3	342.9	339.6	336.2	334.4	333.0	329.7	326.3	323.0	318.8	315.9
17.5°	339.1	335.3	332.0	327.7	325.8	324.4	320.2	316.4	312.1	307.9	305.0
20°	330.1	325.3	321.6	316.8	315.4	313.0	308.8	304.5	299.7	295.1	291.7
22.5°	318.3	313.5	309.3	304.5	302.1	299.7	295.5	290.3	285.5	281.8	278.4
25°	304.5	300.2	295.1	290.8	287.9	285.0	280.3	276.0	271.8	266.1	262.7
27.5°	289.3	284.2	280.3	274.6	271.8	269.9	264.7	259.0	255.2	249.9	246.2
30°	272.2	267.5	263.2	257.6	254.7	252.8	248.0	242.9	239.0	233.9	230.1
32.5°	254.2	249.0	243.8	240.0	236.6	234.7	229.6	226.2	221.4	217.3	212.9
35°	234.7	229.6	225.8	220.6	218.7	216.8	212.5	208.3	204.0	200.1	196.8
37.5°	213.9	210.1	205.9	202.1	200.6	198.7	193.6	189.7	186.4	182.7	179.8
40°	193.6	190.2	187.3	183.5	181.2	179.8	176.0	172.6	168.9	166.5	163.6
42.5°	175.0	171.2	168.4	165.5	163.2	161.7	158.4	156.1	153.2	150.8	147.5
45°	155.6	153.7	150.3	147.9	146.5	144.7	142.3	139.5	137.1	135.1	132.7
47.5°	138.5	136.6	134.2	131.4	130.5	129.0	126.6	124.7	122.8	120.9	118.6
50°	122.8	120.4	118.6	116.7	115.7	114.3	111.9	111.0	109.5	107.6	106.3
52.5°	108.6	106.8	104.9	102.5	102.0	101.0	99.6	97.7	96.2	95.3	94.4
55°	95.8	94.0	92.5	90.6	90.1	89.2	87.3	86.3	85.3	84.4	83.4
57.5°	84.4	82.5	80.7	79.7	78.8	77.8	77.3	75.9	74.9	74.5	73.5
60°	74.0	72.1	70.6	69.3	68.8	68.3	67.4	66.4	65.5	64.5	64.0
62.5°	64.0	62.1	61.2	60.2	59.3	59.3	58.3	57.3	56.5	56.0	55.1
65°	55.1	54.1	52.7	51.2	50.8	50.8	49.3	48.8	48.4	47.4	46.4
67.5°	46.4	45.5	44.2	43.7	43.2	42.7	42.3	41.3	40.3	39.9	38.9
70°	38.9	37.9	37.0	36.5	36.0	35.6	34.6	34.1	33.2	32.7	32.2
72.5°	31.4	30.9	29.9	29.4	29.0	28.5	28.0	27.5	26.6	26.1	25.6
75°	25.1	24.7	23.7	23.2	22.7	22.7	22.3	21.3	20.8	20.8	20.3
77.5°	18.9	18.6	18.1	17.6	17.1	17.1	16.6	16.2	15.7	15.7	15.2
80°	13.8	13.3	12.8	12.8	12.8	12.3	11.9	11.9	11.4	11.4	10.9
82.5°	9.0	9.0	8.5	8.5	8.5	8.0	8.0	7.5	7.5	7.5	7.5
85°	5.3	5.3	5.3	4.8	4.8	4.8	4.8	4.8	4.8	4.3	4.8
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



TEST NUMBER: P583438

CATALOG NUMBER: HC805D010-HM80520827-81WWW

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	349.5	349.5	349.5	349.5	349.5	349.5	349.5	349.5	349.5	349.5	349.5
2.5°	347.7	347.2	346.3	346.3	345.3	345.3	344.9	344.4	343.9	343.4	342.9
5°	344.4	342.5	341.5	341.0	340.1	339.6	338.2	337.2	336.7	335.8	334.9
7.5°	338.2	336.2	334.4	334.0	333.5	331.6	330.1	328.7	327.7	326.8	325.8
10°	331.1	329.2	326.8	325.8	324.9	322.5	320.7	319.2	317.3	315.4	314.9
12.5°	322.5	319.7	316.8	315.9	314.5	312.1	310.1	307.9	306.4	304.0	303.6
15°	312.5	309.3	306.9	304.5	303.6	301.2	297.8	296.0	293.1	292.2	289.8
17.5°	300.7	297.3	294.1	293.1	291.7	288.4	285.0	282.7	279.9	278.4	277.0
20°	288.4	284.2	280.8	279.9	277.9	275.1	271.8	269.4	267.1	264.2	262.7
22.5°	274.1	269.4	266.6	264.2	263.7	260.3	256.6	254.7	252.8	250.4	248.5
25°	258.6	254.2	250.9	249.0	248.0	245.3	242.4	240.0	237.1	235.7	233.4
27.5°	242.4	239.5	235.2	233.4	232.0	229.6	226.2	224.8	221.9	220.1	218.7
30°	226.7	222.4	220.1	217.7	216.3	213.9	211.0	209.6	207.3	205.4	204.0
32.5°	209.6	206.8	203.5	202.5	200.6	198.2	196.3	194.0	192.1	190.2	189.7
35°	194.0	190.2	186.9	185.9	184.5	182.2	181.2	179.8	177.4	176.9	175.0
37.5°	176.9	175.0	171.2	169.9	169.4	167.5	165.5	164.6	163.2	161.7	161.2
40°	160.8	158.4	156.6	155.1	154.2	152.7	150.8	150.3	149.4	147.5	147.0
42.5°	145.6	143.3	141.4	140.9	139.5	138.0	137.1	135.6	135.1	134.7	133.7
45°	131.0	129.5	127.6	127.1	126.6	124.7	123.8	122.8	121.9	121.4	120.4
47.5°	117.7	116.2	114.8	114.3	113.4	112.9	111.4	111.0	109.5	109.0	108.6
50°	104.9	103.9	102.9	102.5	101.5	101.0	100.1	99.1	98.2	97.7	97.2
52.5°	93.5	92.5	91.6	91.1	90.6	89.7	88.7	87.7	87.3	86.8	86.3
55°	82.5	81.6	81.2	80.7	80.2	79.7	78.3	77.8	77.3	76.8	75.9
57.5°	72.5	71.6	70.6	70.6	70.1	69.7	68.8	67.9	67.9	66.9	66.0
60°	63.6	62.6	61.6	61.2	60.7	59.7	59.3	58.8	58.3	57.8	56.9
62.5°	54.1	53.6	52.7	52.7	51.7	51.2	50.8	50.3	49.8	48.8	48.4
65°	46.0	45.5	44.5	44.2	44.2	43.7	42.7	42.3	41.8	41.8	41.3
67.5°	38.4	37.9	37.0	36.5	36.5	36.0	35.6	35.6	35.1	34.6	35.1
70°	31.7	30.9	30.9	30.4	30.4	29.9	29.4	29.4	29.4	29.9	29.9
72.5°	25.1	24.7	24.2	24.2	24.2	24.2	23.7	23.7	24.2	24.7	24.7
75°	19.9	19.4	19.4	19.4	18.9	18.9	19.4	19.4	19.9	19.9	19.9
77.5°	14.7	14.7	14.7	14.7	14.7	14.7	15.2	15.2	15.7	15.7	15.7
80°	10.9	10.9	10.9	10.9	10.9	11.4	11.4	11.4	11.4	11.4	11.9
82.5°	7.5	7.5	7.5	7.5	7.5	7.5	7.5	8.0	8.0	8.0	8.0
85°	4.3	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
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



TEST NUMBER: P583438

CATALOG NUMBER: HC805D010-HM80520827-81WWW

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	349.5	349.5	349.5	349.5	349.5	349.5	349.5	349.5
2.5°	342.5	342.5	342.5	342.9	342.0	342.0	342.0	342.0
5°	334.4	334.0	333.5	334.0	333.0	333.0	332.5	332.5
7.5°	324.4	323.9	323.4	323.4	322.5	322.5	322.1	321.6
10°	313.5	312.5	313.0	312.1	311.6	311.1	310.6	310.1
12.5°	301.6	300.7	300.2	299.2	298.3	297.8	298.3	297.3
15°	288.8	287.4	286.9	286.0	285.0	284.5	284.5	284.2
17.5°	274.6	273.6	273.2	272.2	271.8	270.9	270.4	269.9
20°	261.3	259.0	259.4	258.6	258.1	256.2	256.2	256.6
22.5°	246.6	245.3	244.3	243.4	242.9	241.9	241.9	241.4
25°	232.0	230.5	230.1	229.1	228.6	227.7	227.2	227.2
27.5°	217.7	215.8	215.8	214.9	213.9	213.4	212.9	212.5
30°	202.5	201.1	200.6	200.6	200.1	200.1	198.7	199.2
32.5°	188.3	187.3	186.9	185.9	185.9	185.4	185.4	184.0
35°	174.0	172.6	173.1	172.1	171.6	171.2	171.6	171.2
37.5°	160.3	159.3	159.3	158.4	158.4	158.0	157.5	158.4
40°	146.5	146.0	145.6	145.2	145.6	145.2	144.2	144.7
42.5°	132.7	132.7	132.4	132.4	131.9	131.9	131.9	131.9
45°	120.4	120.1	120.1	119.6	119.6	119.6	119.6	119.1
47.5°	108.1	107.6	107.6	107.6	107.3	107.3	106.8	107.3
50°	96.2	96.2	95.8	95.8	96.2	95.8	95.3	95.3
52.5°	85.3	85.3	84.9	84.9	84.4	83.9	84.4	84.4
55°	75.4	74.9	74.5	74.5	74.0	73.5	73.5	74.0
57.5°	66.0	65.5	65.0	65.0	64.0	63.6	63.6	63.6
60°	56.9	56.0	56.0	55.5	55.5	55.1	55.1	55.1
62.5°	48.4	47.9	47.9	47.9	47.9	47.4	47.4	47.4
65°	41.3	41.3	41.3	41.8	41.8	42.3	42.3	42.3
67.5°	35.6	36.0	36.0	36.0	36.5	36.5	36.5	36.0
70°	30.4	30.4	30.4	30.9	30.9	30.9	30.9	30.9
72.5°	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1
75°	19.9	20.3	20.3	20.3	19.9	20.3	20.3	19.9
77.5°	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7
80°	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9
82.5°	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
85°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
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



Report Generated By 670245859 / DESKTOP-HRDQ47P





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













(END OF REPORT)