

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: P583471

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

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P583471
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/21/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC805D010-HM80520835-81WWBB
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WALLWASH DISTRIBUTION, WHITE BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 611.5 lumens
Efficiency: N/A
Efficacy: 101.9 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.07 / 1.16
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

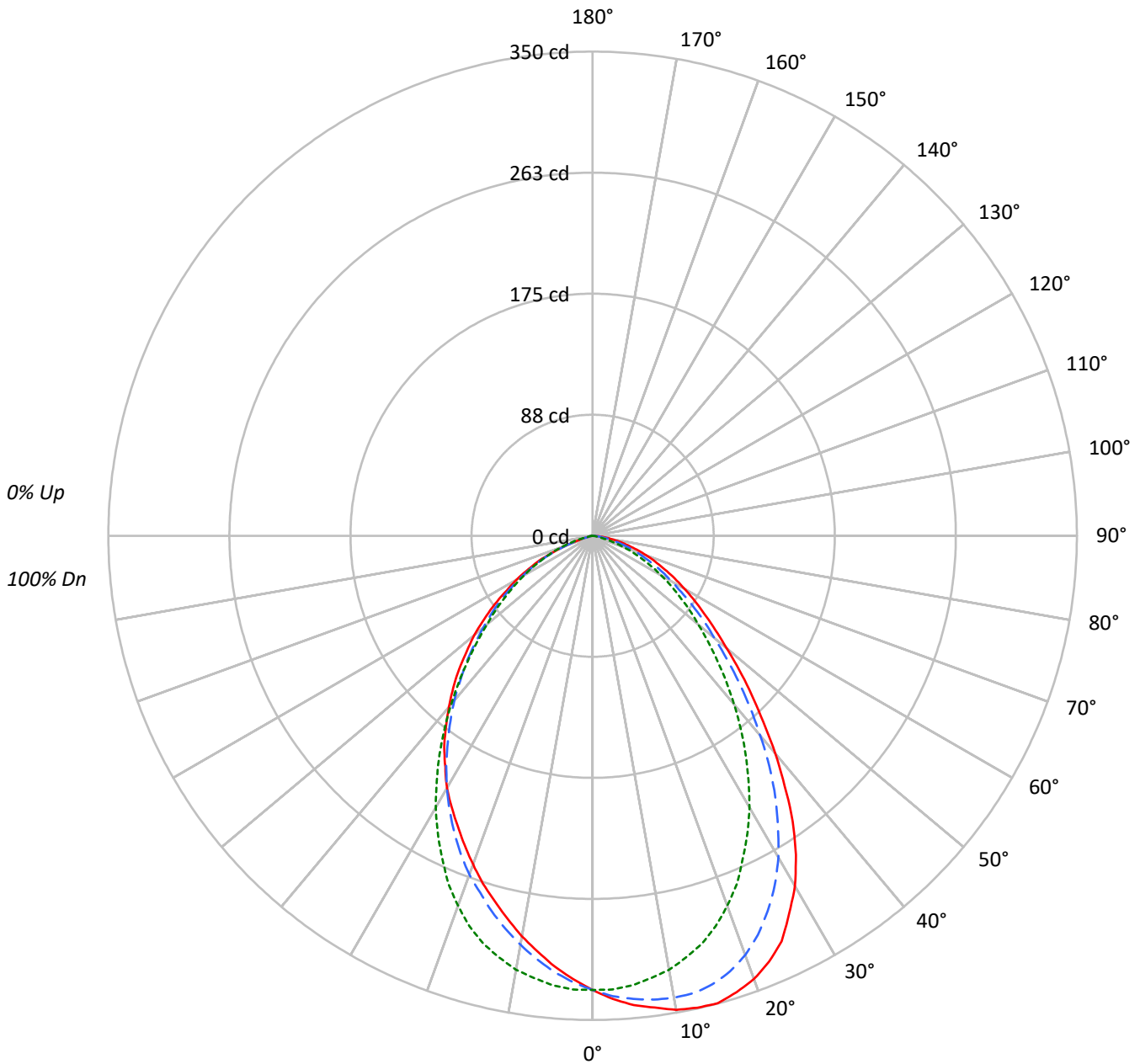
Input Watts (W): 6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P583471

CATALOG NUMBER: HC805D010-HM80520835-81WWBB

Luminous Intensity Polar Plot





TEST NUMBER: P583471

CATALOG NUMBER: HC805D010-HM80520835-81WWBB

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	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77																			
3	95	86	79	74	93	85	78	73	82	76	72	79	74	71	77	73	69	67																			
4	88	78	70	64	86	76	69	64	74	68	63	72	66	62	70	65	61	59																			
5	82	70	63	57	80	69	62	56	67	61	56	65	60	55	64	59	55	53																			
6	76	64	56	51	74	63	56	50	62	55	50	60	54	50	58	53	49	47																			
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43																			
8	66	54	46	41	65	53	46	41	52	46	41	51	45	41	50	44	40	39																			
9	62	50	43	37	61	50	42	37	48	42	37	47	41	37	46	41	37	35																			
10	59	47	39	34	57	46	39	34	45	39	34	44	38	34	43	38	34	32																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	10124	10124	10124
5°	10540	10100	9679
10°	10897	9973	9206
15°	11170	9743	8728
20°	11190	9339	8292
25°	11003	8748	7863
30°	10415	8072	7499
35°	9494	7258	7039
40°	8260	6400	6501
45°	7082	5543	5953
50°	6054	4778	5344
55°	5301	4118	4645
60°	4724	3515	3904
65°	4195	2868	3116
70°	3715	2128	1767
75°	3098	1108	524
80°	2451	337	89
85°	1734	177	0



TEST NUMBER: P583471

CATALOG NUMBER: HC805D010-HM80520835-81WWBB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.9	5.1
10°-20°	86.7	14.2
20°-30°	122.7	20.1
30°-40°	128.4	21.0
40°-50°	107.1	17.5
50°-60°	75.9	12.4
60°-70°	43.7	7.2
70°-80°	14.1	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°	240.4	39.3
0°-40°	368.8	60.3
0°-60°	551.8	90.2
0°-90°	611.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	611.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	328	328	328	328	328	
5°	340	336	326	316	313	33
15°	350	336	305	281	273	98
25°	323	299	257	236	231	148
35°	252	230	193	182	187	156
45°	162	149	127	129	136	126
55°	99	88	77	80	86	89
65°	58	48	39	39	43	57
75°	26	19	9	4	4	28
85°	5	2	0	0	0	6
90°	0	0	0	0	0	



TEST NUMBER: P583471

CATALOG NUMBER: HC805D010-HM80520835-81WWBB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	328.3	328.3	328.3	328.3	328.3	328.3	328.3	328.3	328.3	328.3	328.3
2.5°	335.2	334.7	334.2	334.7	334.2	334.7	334.2	334.2	333.7	333.2	333.2
5°	340.5	340.1	340.1	340.1	339.6	339.1	339.1	338.6	337.7	337.2	336.1
7.5°	344.0	344.5	344.5	344.5	343.5	343.5	342.6	341.6	340.5	339.6	338.2
10°	348.0	348.0	347.5	347.0	345.9	345.5	345.0	344.0	342.6	340.5	339.1
12.5°	349.4	349.4	348.9	348.0	347.5	347.0	346.5	345.0	343.1	340.5	338.6
15°	349.9	348.9	348.4	348.0	347.0	345.5	345.5	343.5	341.0	338.2	335.6
17.5°	345.9	346.5	345.5	344.5	343.1	342.1	340.5	339.1	336.1	332.8	330.3
20°	341.0	340.5	340.1	338.6	336.7	336.1	334.7	332.3	329.8	325.8	322.5
22.5°	333.2	332.8	331.8	330.7	328.8	327.9	326.3	323.4	320.0	316.0	312.2
25°	323.4	322.5	320.9	319.0	317.6	316.5	314.6	311.6	307.7	303.3	299.4
27.5°	307.7	309.2	308.2	305.2	303.8	301.8	301.3	297.5	294.0	289.6	285.1
30°	292.5	292.5	291.0	289.6	287.0	285.6	283.7	280.7	277.2	271.8	268.5
32.5°	273.4	272.9	270.9	270.4	268.5	265.5	265.0	261.1	257.6	253.8	249.3
35°	252.2	251.3	249.3	247.8	246.8	245.4	243.9	240.5	237.0	233.1	230.2
37.5°	228.1	228.1	227.7	225.3	224.3	223.2	221.8	218.3	216.4	212.5	209.6
40°	205.2	204.7	203.1	202.7	201.7	200.3	199.3	197.3	194.4	191.4	188.4
42.5°	182.5	183.0	181.1	181.6	179.7	178.6	178.1	175.2	173.7	170.8	168.3
45°	162.4	162.0	161.0	160.5	159.4	158.5	157.5	156.1	153.6	150.7	149.1
47.5°	143.8	142.3	142.3	141.8	141.4	139.3	138.9	137.4	136.0	133.0	131.1
50°	126.2	126.2	126.2	125.7	124.1	123.7	122.7	121.3	119.7	117.8	114.8
52.5°	111.9	111.9	111.9	111.4	109.4	108.9	108.4	106.5	104.5	103.1	101.1
55°	98.6	99.1	98.6	97.7	96.2	96.2	94.7	93.7	91.8	90.3	88.3
57.5°	87.4	87.4	86.4	85.8	84.9	84.4	83.4	82.5	80.0	78.5	76.0
60°	76.6	76.0	76.0	75.1	74.1	73.1	72.7	71.1	70.1	67.8	65.7
62.5°	66.8	66.8	65.7	65.7	63.8	63.8	63.3	61.9	60.3	57.9	57.0
65°	57.5	57.5	57.0	56.4	54.9	54.5	54.0	52.5	51.0	49.6	48.1
67.5°	49.1	49.1	48.1	47.6	46.6	46.1	45.1	44.2	42.7	41.2	39.7
70°	41.2	40.7	40.2	39.7	38.8	38.3	37.3	36.3	34.8	33.9	32.4
72.5°	33.4	33.4	32.9	31.8	31.4	30.9	30.4	29.4	28.0	26.5	25.5
75°	26.0	26.0	26.0	25.0	24.1	23.6	23.6	22.6	21.5	20.1	19.2
77.5°	20.1	19.6	19.2	19.2	18.2	17.7	17.1	16.6	15.2	14.7	13.8
80°	13.8	14.2	13.8	13.3	12.8	12.2	12.2	11.3	10.8	9.8	8.9
82.5°	9.3	8.9	8.9	8.4	8.4	7.9	7.9	6.8	6.3	5.9	5.4
85°	4.9	4.9	4.4	4.4	4.4	4.0	4.0	3.5	3.5	3.0	2.4
87.5°	1.4	1.4	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



TEST NUMBER: P583471

CATALOG NUMBER: HC805D010-HM80520835-81WWBB

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	328.3	328.3	328.3	328.3	328.3	328.3	328.3	328.3	328.3	328.3	328.3
2.5°	332.8	331.8	331.2	331.2	330.7	330.3	329.8	329.3	328.3	328.3	327.4
5°	335.2	334.2	333.7	332.3	331.2	331.2	329.3	328.8	327.4	326.3	325.3
7.5°	337.2	335.2	333.7	332.3	331.2	330.3	328.3	326.3	324.4	322.5	321.4
10°	337.2	335.2	332.8	330.3	329.3	328.3	325.8	323.0	320.4	318.5	316.0
12.5°	336.1	333.2	330.3	328.3	326.3	324.9	322.0	319.0	316.0	312.2	310.1
15°	333.2	329.3	326.3	323.0	321.4	319.0	316.5	312.2	308.7	305.2	302.8
17.5°	327.4	322.5	319.0	315.5	313.1	311.6	307.7	303.8	299.8	295.9	293.0
20°	318.5	314.1	310.1	305.7	303.8	301.8	296.9	293.0	289.1	284.6	281.7
22.5°	307.7	303.3	297.9	294.5	291.5	289.1	284.6	280.2	276.3	272.3	268.5
25°	294.5	290.0	285.1	279.7	277.8	275.3	270.4	266.0	261.5	257.1	253.8
27.5°	280.2	274.4	270.4	264.5	262.5	260.1	254.7	249.8	245.9	242.4	238.6
30°	263.1	258.7	253.3	247.8	245.9	243.5	239.0	234.6	230.7	226.7	222.8
32.5°	244.4	240.0	234.6	230.7	227.7	225.8	221.3	217.4	213.4	209.6	206.1
35°	224.8	219.9	215.9	212.0	209.6	207.1	202.7	199.3	196.3	192.8	189.5
37.5°	204.7	201.2	197.3	192.8	190.4	188.4	185.1	181.1	178.6	175.7	173.2
40°	185.1	181.1	177.6	173.7	171.8	170.3	166.9	163.9	161.5	159.0	157.5
42.5°	164.9	161.5	158.0	155.6	154.1	152.6	150.2	146.8	145.3	142.8	141.4
45°	146.3	143.3	140.9	137.4	136.5	135.5	132.5	130.0	128.6	127.1	126.2
47.5°	128.6	126.6	123.7	121.7	120.2	119.2	117.3	115.3	113.8	112.9	111.9
50°	113.4	111.0	108.9	107.0	106.1	104.5	102.6	101.6	100.5	99.6	99.6
52.5°	99.1	96.7	94.7	93.2	92.3	91.3	89.8	89.3	88.3	88.3	87.9
55°	85.8	84.4	82.5	80.4	80.0	79.5	78.5	77.6	77.1	76.6	77.1
57.5°	74.6	73.1	71.1	69.7	69.2	68.7	68.2	67.3	66.8	66.8	66.8
60°	64.3	62.8	61.3	59.8	59.8	58.9	58.4	57.9	57.5	57.0	57.0
62.5°	54.9	53.5	52.1	51.0	50.5	50.0	49.1	48.6	48.1	48.1	47.6
65°	46.6	44.6	44.2	42.7	42.3	41.7	41.2	40.2	39.7	39.3	38.8
67.5°	38.3	37.3	35.8	34.8	34.4	33.9	33.4	32.4	31.8	31.4	30.4
70°	30.9	29.9	29.0	28.0	27.5	26.9	26.0	25.0	24.5	23.6	22.0
72.5°	24.1	23.1	22.0	21.1	20.6	20.1	19.2	18.2	17.1	16.2	15.2
75°	18.2	17.1	15.7	14.7	14.2	14.2	12.8	11.7	10.8	9.3	8.4
77.5°	12.8	11.3	10.8	9.8	9.3	8.4	7.3	6.3	5.4	4.9	4.0
80°	8.4	7.3	6.3	5.9	5.4	4.9	4.4	3.5	2.4	1.9	1.4
82.5°	4.9	4.4	4.0	3.5	3.0	2.4	1.9	1.9	1.4	1.0	0.5
85°	2.4	1.9	1.4	1.4	1.0	1.0	1.0	0.5	0.5	0.5	0.5
87.5°	1.0	0.5	0.5	0.5	0.5	0.5	0.5	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: P583471

CATALOG NUMBER: HC805D010-HM80520835-81WWBB

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	328.3	328.3	328.3	328.3	328.3	328.3	328.3	328.3	328.3	328.3	328.3
2.5°	326.9	326.3	325.8	325.3	325.3	324.4	324.4	323.9	323.0	322.5	322.5
5°	323.9	322.5	321.4	320.9	320.4	319.0	318.5	317.6	316.5	315.5	315.1
7.5°	319.5	317.1	316.0	315.5	314.1	312.7	311.6	310.1	308.7	307.3	306.7
10°	314.1	311.6	309.2	308.2	306.7	305.7	303.8	301.8	300.3	298.9	297.5
12.5°	307.3	304.3	301.8	300.8	299.4	297.5	294.5	293.5	291.0	290.0	288.1
15°	299.4	295.9	293.5	291.9	290.5	287.6	285.6	283.7	281.2	280.2	278.3
17.5°	289.6	285.6	283.2	281.7	280.7	278.3	275.3	272.9	270.4	269.4	268.0
20°	277.8	275.3	271.8	270.4	269.4	266.5	263.6	262.5	260.6	258.7	257.1
22.5°	264.5	262.0	258.7	257.1	256.6	254.2	251.7	250.3	248.9	247.3	245.9
25°	250.8	247.8	244.9	243.9	242.9	241.0	239.0	238.0	236.5	235.6	234.6
27.5°	236.0	233.1	230.7	229.2	228.1	226.7	225.8	224.8	223.8	222.8	222.3
30°	220.4	217.4	215.5	214.5	213.4	212.9	211.5	211.0	210.6	209.6	210.1
32.5°	204.7	202.2	200.3	198.7	198.7	197.7	197.3	197.3	196.8	196.8	196.8
35°	187.5	186.0	184.6	184.0	183.5	183.0	182.5	183.0	182.5	183.0	183.5
37.5°	171.8	170.3	169.3	168.8	168.3	168.8	168.3	168.3	168.8	169.9	170.3
40°	155.6	154.5	153.6	154.1	153.6	153.6	153.6	155.1	155.6	156.1	156.6
42.5°	140.4	139.3	138.9	138.9	139.3	138.9	139.8	140.4	141.4	142.8	143.8
45°	125.7	125.1	125.1	125.7	125.1	126.2	126.2	127.1	128.6	129.5	130.6
47.5°	111.9	111.9	111.9	112.4	112.4	112.9	113.8	114.3	115.3	116.3	117.3
50°	99.1	99.6	100.1	100.1	100.1	101.1	102.1	102.6	103.1	103.5	105.0
52.5°	87.9	88.3	88.3	88.8	89.3	89.8	90.3	91.3	91.8	92.8	93.2
55°	77.1	77.1	78.0	78.5	78.5	78.5	79.5	79.5	80.4	80.9	82.0
57.5°	66.8	67.3	67.3	67.8	67.8	68.2	68.7	69.2	69.7	70.1	70.6
60°	57.0	57.0	57.0	57.5	57.9	58.4	57.9	58.9	58.9	59.8	60.3
62.5°	47.6	48.1	48.1	48.1	48.1	48.1	48.1	48.6	49.1	49.6	50.0
65°	38.8	38.8	38.8	38.3	38.8	38.3	38.8	39.3	39.3	39.7	40.2
67.5°	29.9	29.9	29.0	29.0	29.4	29.4	29.4	29.4	29.0	29.9	29.9
70°	21.5	21.1	20.6	20.1	20.1	19.6	19.6	19.2	19.2	19.2	19.2
72.5°	14.2	13.3	12.2	11.7	11.3	11.3	10.3	9.8	10.3	10.3	10.3
75°	7.3	6.3	5.9	5.4	4.9	4.9	4.4	4.4	4.4	4.4	4.4
77.5°	3.0	2.4	1.9	1.9	1.4	1.4	1.4	1.4	1.4	1.4	1.4
80°	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
82.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
85°	0.5	0.0	0.0	0.5	0.0	0.5	0.5	0.5	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: P583471

CATALOG NUMBER: HC805D010-HM80520835-81WWBB

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	328.3	328.3	328.3	328.3	328.3	328.3	328.3	328.3
2.5°	322.0	322.0	321.4	322.0	320.9	321.4	320.9	320.9
5°	314.6	313.6	313.6	313.6	313.1	313.1	312.7	312.7
7.5°	305.7	305.2	304.8	304.3	303.8	303.3	303.3	303.3
10°	296.9	295.9	295.9	295.4	294.5	294.0	294.0	294.0
12.5°	286.6	286.1	285.6	285.6	283.7	284.2	283.7	283.7
15°	276.7	276.3	276.3	274.8	273.9	273.9	273.9	273.4
17.5°	266.5	266.0	265.5	264.5	263.6	263.6	263.1	263.6
20°	255.7	255.2	254.2	254.2	253.8	253.3	252.2	252.7
22.5°	244.9	243.9	243.5	243.5	242.9	242.9	241.9	241.9
25°	233.7	233.1	232.6	233.1	232.1	232.1	231.1	231.1
27.5°	221.8	221.3	221.3	221.3	220.8	221.3	220.8	220.8
30°	210.1	210.1	209.6	209.6	210.1	209.6	210.1	210.6
32.5°	197.3	197.3	197.7	197.7	198.2	198.2	198.2	198.2
35°	184.0	185.1	185.1	185.5	186.0	186.5	186.5	187.0
37.5°	171.8	172.2	172.7	173.2	174.2	174.2	174.2	174.2
40°	158.5	159.0	160.0	159.4	161.5	162.0	161.5	161.5
42.5°	144.7	145.8	146.3	147.2	147.7	148.7	149.1	149.1
45°	132.0	132.5	133.5	134.4	134.9	136.5	136.5	136.5
47.5°	118.7	119.7	120.2	121.3	121.7	123.2	123.7	123.2
50°	106.1	107.0	108.0	108.0	109.4	109.9	111.0	111.4
52.5°	93.7	94.2	95.2	95.6	96.7	97.7	98.2	98.6
55°	82.0	82.5	83.4	83.4	84.9	85.3	86.4	86.4
57.5°	71.1	71.7	72.7	72.2	73.1	74.1	74.1	73.6
60°	60.8	60.8	60.8	61.9	62.4	62.8	63.3	63.3
62.5°	50.0	51.0	51.5	51.5	52.1	52.5	52.5	52.1
65°	40.2	41.2	41.7	41.7	42.3	42.3	42.3	42.7
67.5°	30.4	30.4	30.4	30.9	30.4	30.4	30.4	30.4
70°	19.2	19.2	19.2	19.2	18.7	19.2	19.2	19.6
72.5°	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
75°	4.4	4.4	4.4	4.9	4.4	4.4	4.4	4.4
77.5°	1.9	1.4	1.9	1.9	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°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
85°	0.0	0.5	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



Report Generated By 670245859 / DESKTOP-HRDQ47P





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













(END OF REPORT)