

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: P583447

Luminaire Tested: **HC805D010-HM80520830-81RWWC**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P583447
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-HM80520830-81RWWC
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WALLWASH DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 671.8 lumens
Efficiency: N/A
Efficacy: 112.0 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

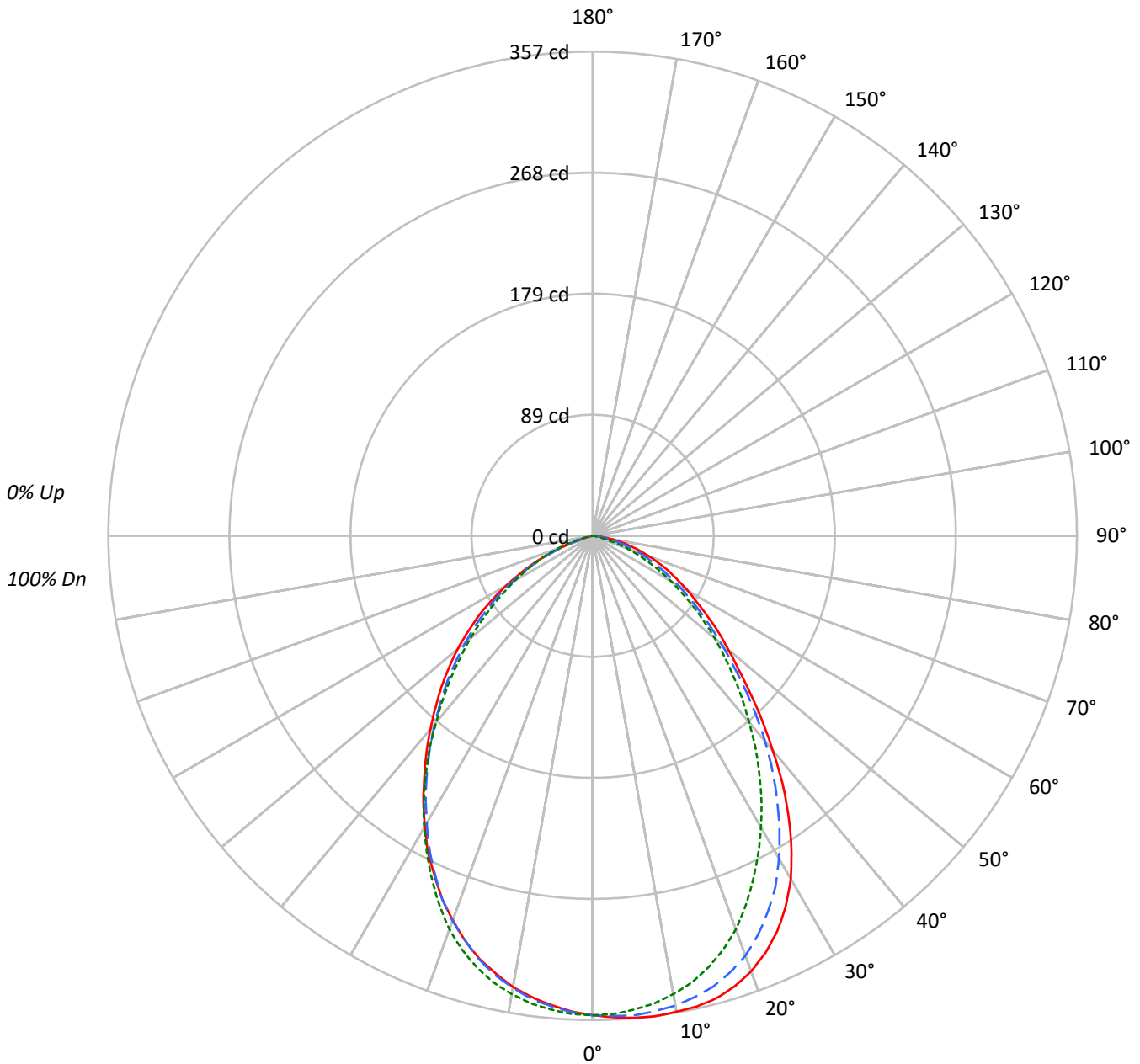
Input Watts (W): 6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P583447

CATALOG NUMBER: HC805D010-HM80520830-81RWWC

Luminous Intensity Polar Plot





TEST NUMBER: P583447

CATALOG NUMBER: HC805D010-HM80520830-81RWWC

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°	10901	10901	10901
5°	11044	10856	10753
10°	11156	10743	10580
15°	11269	10516	10305
20°	11213	10130	9894
25°	10952	9523	9394
30°	10404	8841	8806
35°	9471	8067	8139
40°	8300	7218	7483
45°	7161	6419	6873
50°	6270	5637	6227
55°	5554	4844	5484
60°	5008	4077	4539
65°	4517	3276	3473
70°	3958	2389	1911
75°	3384	1239	500
80°	2593	337	89
85°	1663	0	0



TEST NUMBER: P583447

CATALOG NUMBER: HC805D010-HM80520830-81RWWC

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.4	5.0
10°-20°	93.8	14.0
20°-30°	133.1	19.8
30°-40°	140.1	20.9
40°-50°	119.2	17.7
50°-60°	86.1	12.8
60°-70°	49.0	7.3
70°-80°	15.4	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°	260.2	38.7
0°-40°	400.3	59.6
0°-60°	605.5	90.1
0°-90°	671.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	671.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	354	354	354	354	354	
5°	357	355	351	348	347	34
15°	353	344	329	323	323	99
25°	322	306	280	275	276	147
35°	252	237	214	213	216	157
45°	164	158	147	151	158	128
55°	103	96	90	95	102	93
65°	62	53	45	44	48	61
75°	28	22	10	5	4	30
85°	5	3	0	0	0	6
90°	0	0	0	0	0	



TEST NUMBER: P583447

CATALOG NUMBER: HC805D010-HM80520830-81RWWC

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	353.5	353.5	353.5	353.5	353.5	353.5	353.5	353.5	353.5	353.5	353.5
2.5°	355.4	355.9	354.9	354.9	355.9	354.9	355.4	355.4	354.9	354.9	354.4
5°	356.8	356.3	356.3	356.3	356.8	355.9	355.4	355.9	354.9	354.9	354.9
7.5°	357.3	357.3	356.8	356.3	356.3	356.3	355.9	355.4	354.9	354.0	353.5
10°	356.3	356.3	356.8	355.9	355.9	354.9	354.9	354.0	354.0	353.0	351.6
12.5°	355.4	354.9	354.9	354.0	354.0	353.0	353.0	351.6	351.1	349.8	348.3
15°	353.0	352.5	351.6	351.1	350.7	350.2	349.3	348.8	347.4	345.5	344.0
17.5°	348.3	347.8	347.4	346.4	345.5	345.0	344.5	343.1	341.3	339.8	337.4
20°	341.7	341.3	341.3	339.8	339.3	337.9	337.4	335.5	334.2	331.3	329.4
22.5°	332.8	333.2	332.3	331.3	330.4	328.9	328.0	326.1	323.8	320.9	318.5
25°	321.9	322.4	321.4	320.4	319.0	318.0	317.2	314.3	311.9	308.7	305.8
27.5°	308.2	308.2	308.2	307.3	304.9	304.4	303.4	300.7	297.3	294.5	291.7
30°	292.2	291.7	291.7	290.3	289.3	287.4	286.0	283.7	281.3	277.9	274.7
32.5°	272.8	273.3	271.8	270.9	269.4	269.4	267.6	265.7	262.9	259.6	256.3
35°	251.6	252.0	251.1	250.7	248.3	247.8	247.3	244.9	243.1	240.7	236.9
37.5°	229.8	229.3	228.9	228.9	227.4	226.6	225.6	224.2	221.3	219.4	217.6
40°	206.2	206.2	206.2	205.8	205.3	204.3	203.8	202.9	201.1	199.2	197.7
42.5°	185.1	185.1	184.6	184.1	183.1	183.6	182.7	181.7	179.8	178.4	177.4
45°	164.2	164.2	164.2	164.7	163.7	162.3	162.3	161.4	160.5	159.6	158.1
47.5°	145.8	147.2	146.3	145.8	146.3	144.4	144.4	143.5	142.6	141.6	139.7
50°	130.7	130.7	130.7	129.8	129.3	129.3	127.8	127.0	126.5	125.6	123.7
52.5°	117.1	116.1	116.1	115.6	115.2	114.2	114.2	113.2	111.4	110.5	109.0
55°	103.3	103.3	102.9	102.5	102.0	101.5	101.0	99.6	98.6	97.2	95.8
57.5°	91.1	92.0	91.6	90.6	89.7	89.7	88.7	87.7	86.4	85.0	83.6
60°	81.2	80.7	80.7	80.2	79.2	78.8	78.4	77.0	75.5	74.1	72.7
62.5°	70.7	70.7	70.7	69.9	68.9	68.5	68.0	67.0	65.1	63.7	62.7
65°	61.9	61.4	60.9	60.4	60.0	59.0	58.5	57.6	56.1	54.7	53.4
67.5°	52.9	52.4	52.4	51.9	50.5	50.0	50.0	48.6	47.2	45.7	44.4
70°	43.9	43.9	43.9	43.0	42.5	42.0	41.5	40.6	39.1	37.7	36.4
72.5°	36.4	35.9	35.9	35.4	34.0	33.5	33.0	32.1	30.6	29.7	28.8
75°	28.4	28.4	27.9	27.4	26.9	26.5	26.0	25.0	23.6	22.1	21.7
77.5°	21.7	21.2	21.2	20.7	19.9	19.4	19.4	18.4	17.0	16.0	15.1
80°	14.6	15.1	14.6	14.1	13.6	13.2	12.7	12.3	11.4	10.4	9.5
82.5°	9.0	9.5	9.0	9.0	8.5	8.0	8.0	7.1	6.6	6.1	5.6
85°	4.7	4.7	4.7	4.7	4.2	4.2	4.2	3.8	3.4	2.9	2.9
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



TEST NUMBER: P583447

CATALOG NUMBER: HC805D010-HM80520830-81RWWC

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	353.5	353.5	353.5	353.5	353.5	353.5	353.5	353.5	353.5	353.5	353.5
2.5°	354.9	354.4	354.0	354.0	354.0	354.0	354.0	353.5	353.0	353.0	353.0
5°	354.0	354.0	354.0	353.5	353.0	353.0	352.0	351.6	351.1	350.7	350.2
7.5°	353.0	352.0	351.6	351.1	350.7	350.7	349.8	348.8	348.8	347.8	346.9
10°	350.2	349.8	348.8	347.8	347.4	346.9	345.9	344.5	344.0	343.1	342.2
12.5°	346.9	345.9	345.0	343.1	342.6	342.2	340.3	338.9	337.9	337.4	335.0
15°	342.6	340.8	339.3	337.0	336.5	335.5	334.2	332.8	330.9	329.4	328.5
17.5°	335.0	333.2	330.9	328.5	327.5	327.5	325.2	323.3	320.9	320.0	318.0
20°	326.1	323.8	321.9	319.0	317.7	316.2	314.8	311.9	310.0	308.7	306.3
22.5°	315.8	312.4	310.0	307.3	304.9	303.4	301.2	298.8	296.4	294.9	293.0
25°	302.5	299.7	295.9	293.0	291.7	289.8	286.9	284.6	282.3	279.9	278.9
27.5°	287.9	284.2	280.8	277.5	276.1	274.7	271.4	268.5	266.7	264.3	263.3
30°	271.8	268.1	264.3	261.4	260.0	257.7	255.8	252.4	250.2	248.3	245.9
32.5°	253.4	250.7	247.3	243.1	242.2	240.2	237.4	235.9	233.2	231.7	229.8
35°	233.7	231.7	228.4	225.2	223.7	222.8	220.4	217.6	215.7	214.3	213.3
37.5°	214.7	212.3	209.1	206.7	205.8	204.3	201.6	200.1	198.2	197.3	195.4
40°	194.4	192.1	189.7	188.3	186.9	185.9	184.1	182.7	180.7	179.3	178.8
42.5°	174.6	173.2	171.3	169.4	169.0	167.6	166.6	165.2	163.7	163.3	161.8
45°	156.7	155.3	153.3	151.5	151.1	150.1	149.6	148.2	147.2	147.2	147.2
47.5°	138.7	137.3	135.5	134.5	135.0	133.1	133.1	132.6	131.7	131.7	132.1
50°	122.7	120.8	120.3	119.5	118.5	117.5	118.0	116.6	116.6	117.5	117.1
52.5°	107.6	105.7	105.2	104.3	103.8	103.8	103.3	103.3	102.9	103.3	103.3
55°	94.0	92.5	91.6	90.6	90.1	90.1	90.1	89.7	89.2	90.1	90.6
57.5°	81.6	81.2	80.2	78.8	78.4	77.9	77.4	77.4	77.4	77.4	77.9
60°	70.7	69.9	68.9	67.5	67.5	67.0	66.6	66.1	66.1	66.1	66.1
62.5°	61.4	60.0	58.5	57.6	57.1	56.6	56.1	55.2	55.2	55.2	55.2
65°	51.9	50.5	49.6	48.6	47.6	47.6	46.7	46.2	45.4	44.9	43.9
67.5°	43.0	42.0	41.1	39.6	39.1	38.7	37.7	37.2	35.9	35.4	35.0
70°	35.0	33.5	32.6	31.6	31.1	30.2	29.2	28.4	27.4	26.5	25.5
72.5°	27.4	26.0	25.0	24.1	23.1	23.1	21.7	20.7	19.4	18.4	17.0
75°	20.3	18.9	18.0	16.5	16.0	15.6	14.1	13.2	11.9	10.4	9.5
77.5°	13.6	12.7	11.9	10.4	9.5	9.5	8.0	7.1	6.1	4.7	4.2
80°	8.5	7.5	6.6	5.6	5.6	4.7	4.2	3.4	2.4	1.9	1.4
82.5°	4.7	4.2	3.8	2.9	2.9	2.4	1.9	1.4	1.0	0.5	0.5
85°	2.4	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



TEST NUMBER: P583447

CATALOG NUMBER: HC805D010-HM80520830-81RWWC

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	353.5	353.5	353.5	353.5	353.5	353.5	353.5	353.5	353.5	353.5	353.5
2.5°	352.5	352.5	352.0	352.0	352.0	351.6	352.0	351.6	351.6	351.6	352.0
5°	350.7	349.8	349.8	349.3	349.3	348.8	349.3	348.8	348.3	347.8	348.3
7.5°	346.9	345.9	345.5	345.0	345.0	345.0	344.5	344.0	344.5	343.1	344.0
10°	341.7	341.3	340.3	339.8	339.3	339.8	339.3	338.4	338.4	338.4	337.9
12.5°	335.0	334.2	333.7	333.2	332.3	332.3	332.8	331.8	331.8	330.9	330.9
15°	327.0	326.1	325.2	325.2	324.3	324.3	323.8	323.8	323.3	322.8	322.8
17.5°	317.2	315.8	314.8	315.3	314.8	314.3	314.3	313.4	312.9	313.4	313.4
20°	305.4	304.4	303.4	303.9	303.0	302.5	303.0	301.5	302.0	302.0	302.0
22.5°	292.2	291.7	290.3	290.3	289.3	288.8	289.3	289.3	289.8	289.3	289.3
25°	277.5	276.5	275.7	275.7	275.2	274.7	275.2	275.7	275.2	275.7	275.7
27.5°	261.9	260.5	260.5	259.6	259.6	260.0	259.6	260.0	260.5	260.5	261.4
30°	244.9	244.4	243.9	243.5	243.5	243.9	243.9	243.9	244.4	245.4	245.4
32.5°	228.9	227.9	227.0	227.0	227.9	227.4	227.9	227.9	228.9	228.9	229.8
35°	211.4	211.4	210.4	210.9	210.9	210.9	210.9	211.9	212.8	213.3	214.3
37.5°	195.4	193.9	194.4	194.4	194.9	194.4	195.8	195.8	196.8	196.8	197.7
40°	177.9	177.9	178.4	177.9	178.4	178.4	179.3	180.3	180.7	181.7	182.2
42.5°	161.4	162.3	161.4	161.8	162.3	162.8	163.3	163.7	165.7	166.6	168.1
45°	146.3	146.8	147.2	147.7	147.2	148.2	148.7	149.6	151.1	151.5	152.0
47.5°	131.7	132.1	132.6	133.1	133.1	134.1	134.5	135.5	136.3	136.8	137.3
50°	117.5	118.5	119.0	119.0	119.5	120.3	121.3	121.3	122.2	123.7	124.1
52.5°	104.7	104.7	105.7	106.2	106.7	106.7	108.1	108.6	109.0	110.0	111.0
55°	90.6	92.0	92.5	92.5	93.5	94.4	94.9	95.3	95.3	97.2	97.2
57.5°	78.4	78.8	79.7	79.7	79.7	81.2	81.2	82.1	82.6	83.1	84.0
60°	66.1	67.0	67.0	67.5	67.0	68.0	68.5	69.4	69.9	70.3	70.7
62.5°	54.7	54.7	55.2	55.2	55.2	55.2	56.1	56.1	57.1	57.6	58.1
65°	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	44.4	44.4	45.4
67.5°	34.0	33.5	32.6	33.0	32.6	32.6	32.1	32.1	32.6	32.6	33.5
70°	24.5	24.1	23.1	23.1	22.6	22.1	21.7	21.2	20.7	20.7	20.7
72.5°	16.0	15.1	13.6	13.2	13.2	12.3	11.4	10.9	10.9	10.9	10.9
75°	8.0	7.1	6.1	5.6	5.6	4.7	5.1	4.7	4.7	4.7	4.7
77.5°	3.4	2.4	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: P583447

CATALOG NUMBER: HC805D010-HM80520830-81RWWC

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	353.5	353.5	353.5	353.5	353.5	353.5	353.5	353.5
2.5°	351.6	351.6	350.7	351.1	351.1	351.1	351.1	351.1
5°	347.4	347.8	347.4	347.8	347.8	347.4	347.4	347.4
7.5°	343.1	343.5	343.1	343.5	343.5	343.5	343.1	343.1
10°	337.9	337.9	337.9	337.9	337.9	337.4	337.9	337.9
12.5°	330.9	330.9	330.9	331.3	331.3	330.9	330.9	330.4
15°	323.3	322.4	322.8	323.3	322.8	322.8	322.8	322.8
17.5°	312.9	313.4	312.9	312.9	312.9	312.9	313.4	312.9
20°	302.0	302.0	302.5	302.0	302.0	302.0	302.0	301.5
22.5°	289.8	289.3	289.3	289.8	289.8	289.3	289.8	289.8
25°	276.1	276.5	276.1	276.1	276.5	276.5	276.5	276.1
27.5°	261.4	261.9	262.4	261.9	261.9	261.9	262.4	262.9
30°	246.3	247.3	246.3	246.3	247.3	246.8	247.3	247.3
32.5°	230.3	231.7	230.8	231.7	231.7	232.2	231.7	232.2
35°	214.3	215.7	215.7	215.7	216.2	216.7	216.7	216.2
37.5°	199.2	199.7	199.7	200.6	201.1	201.6	201.6	201.1
40°	183.6	184.6	185.1	185.1	185.1	185.9	186.9	185.9
42.5°	168.5	169.0	169.4	169.4	170.3	170.8	171.3	171.3
45°	153.8	154.8	155.3	155.7	156.2	157.2	156.7	157.6
47.5°	138.7	140.2	140.6	141.1	142.1	142.6	143.0	143.5
50°	125.1	126.0	126.0	127.0	128.3	128.3	129.3	129.8
52.5°	111.4	111.8	112.3	112.8	113.7	114.7	114.7	115.6
55°	98.2	98.6	98.6	99.1	99.6	101.5	102.0	102.0
57.5°	84.5	84.5	85.5	85.9	86.4	87.3	87.3	87.3
60°	71.2	71.7	71.7	72.2	72.7	73.6	74.1	73.6
62.5°	58.1	58.5	58.5	59.0	60.0	60.4	60.0	60.0
65°	45.7	46.2	46.2	46.7	47.6	47.6	47.2	47.6
67.5°	33.5	33.5	33.5	33.5	33.5	33.5	33.5	33.5
70°	21.2	20.7	20.3	20.7	20.7	20.7	20.3	21.2
72.5°	10.4	10.9	10.9	10.9	10.9	10.9	10.9	10.4
75°	4.7	4.7	4.2	4.2	4.2	4.7	4.7	4.2
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



Report Generated By 670245859 / DESKTOP-HRDQ47P





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













(END OF REPORT)