

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: P583481

Luminaire Tested: **HC805D010-HM80520840-81RWWC**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P583481
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-HM80520840-81RWWC
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WALLWASH DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 750.9 lumens
Efficiency: N/A
Efficacy: 125.2 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

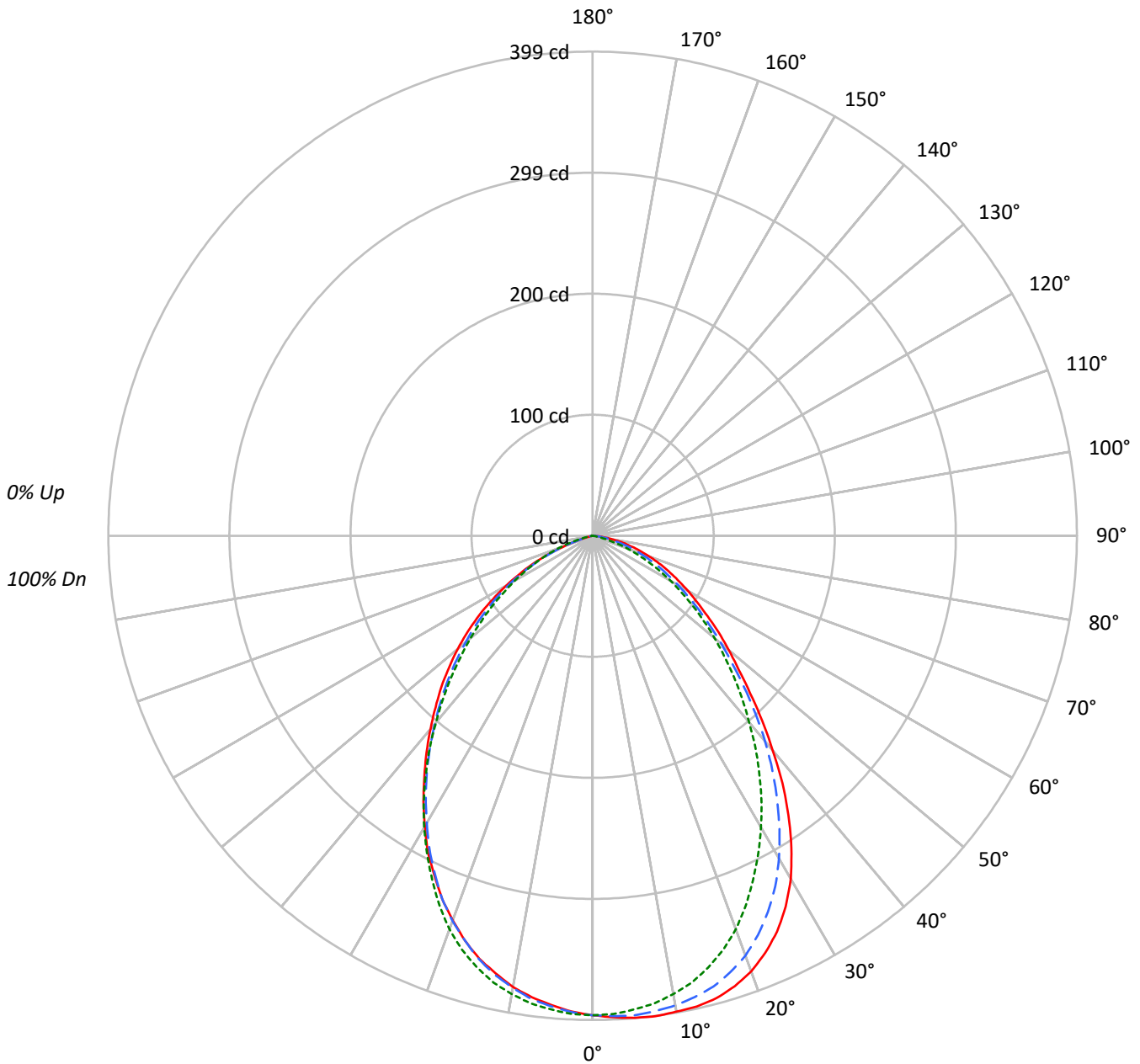
Input Watts (W): 6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P583481

CATALOG NUMBER: HC805D010-HM80520840-81RWWC

Luminous Intensity Polar Plot





TEST NUMBER: P583481

CATALOG NUMBER: HC805D010-HM80520840-81RWWC

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°	12183	12183	12183
5°	12344	12131	12016
10°	12468	12008	11827
15°	12594	11754	11518
20°	12535	11321	11062
25°	12242	10643	10500
30°	11626	9881	9842
35°	10586	9016	9095
40°	9279	8071	8365
45°	8007	7178	7684
50°	7014	6299	6961
55°	6209	5419	6129
60°	5594	4558	5069
65°	5042	3663	3889
70°	4427	2669	2137
75°	3765	1382	572
80°	2912	391	89
85°	1875	0	0



TEST NUMBER: P583481

CATALOG NUMBER: HC805D010-HM80520840-81RWWC

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.3	5.0
10°-20°	104.8	14.0
20°-30°	148.7	19.8
30°-40°	156.6	20.9
40°-50°	133.2	17.7
50°-60°	96.3	12.8
60°-70°	54.8	7.3
70°-80°	17.3	2.3
80°-90°	2.1	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°	290.8	38.7
0°-40°	447.4	59.6
0°-60°	676.8	90.1
0°-90°	750.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	750.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	395	395	395	395	395	
5°	399	397	392	389	388	38
15°	394	385	368	361	361	111
25°	360	342	313	308	309	165
35°	281	265	240	238	242	175
45°	184	177	165	169	176	143
55°	116	107	101	106	114	104
65°	69	60	50	50	53	69
75°	32	24	12	5	5	34
85°	5	3	0	0	0	7
90°	0	0	0	0	0	



TEST NUMBER: P583481

CATALOG NUMBER: HC805D010-HM80520840-81RWWC

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	395.1	395.1	395.1	395.1	395.1	395.1	395.1	395.1	395.1	395.1	395.1
2.5°	397.2	397.8	396.7	396.7	397.8	396.7	397.2	397.2	396.7	396.7	396.2
5°	398.8	398.2	398.2	398.2	398.8	397.8	397.2	397.8	396.7	396.7	396.7
7.5°	399.3	399.3	398.8	398.2	398.2	398.2	397.8	397.2	396.7	395.6	395.1
10°	398.2	398.2	398.8	397.8	397.8	396.7	396.7	395.6	395.6	394.5	393.0
12.5°	397.2	396.7	396.7	395.6	395.6	394.5	394.5	393.0	392.5	390.9	389.3
15°	394.5	394.1	393.0	392.5	391.9	391.4	390.3	389.9	388.2	386.2	384.6
17.5°	389.3	388.8	388.2	387.2	386.2	385.6	385.1	383.5	381.4	379.8	377.2
20°	382.0	381.4	381.4	379.8	379.3	377.7	377.2	375.0	373.5	370.4	368.2
22.5°	371.9	372.4	371.3	370.4	369.3	367.7	366.6	364.5	361.9	358.7	356.1
25°	359.8	360.3	359.2	358.1	356.6	355.5	354.4	351.3	348.7	345.0	341.9
27.5°	344.5	344.5	344.5	343.4	340.8	340.2	339.2	336.0	332.3	329.2	325.9
30°	326.5	325.9	325.9	324.4	323.3	321.3	319.7	317.1	314.5	310.7	307.0
32.5°	304.9	305.5	303.8	302.8	301.2	301.2	299.1	297.0	293.9	290.2	286.4
35°	281.2	281.7	280.6	280.1	277.5	277.0	276.4	273.8	271.7	269.1	264.8
37.5°	256.9	256.4	255.8	255.8	254.2	253.2	252.2	250.5	247.4	245.3	243.2
40°	230.5	230.5	230.5	229.9	229.5	228.4	227.9	226.8	224.7	222.6	221.0
42.5°	206.8	206.8	206.2	205.8	204.7	205.2	204.1	203.1	201.0	199.4	198.3
45°	183.6	183.6	183.6	184.1	183.0	181.5	181.5	180.4	179.3	178.4	176.7
47.5°	163.0	164.6	163.5	163.0	163.5	161.5	161.5	160.4	159.3	158.2	156.1
50°	146.2	146.2	146.2	145.1	144.5	144.5	142.9	141.8	141.4	140.3	138.3
52.5°	130.8	129.8	129.8	129.3	128.7	127.6	127.6	126.6	124.5	123.4	121.9
55°	115.5	115.5	115.0	114.4	114.0	113.4	112.9	111.3	110.2	108.7	107.1
57.5°	101.9	102.8	102.3	101.3	100.2	100.2	99.2	98.2	96.5	94.9	93.4
60°	90.7	90.3	90.3	89.7	88.6	88.1	87.6	85.9	84.4	82.8	81.3
62.5°	79.1	79.1	79.1	78.0	77.0	76.5	76.0	74.9	72.8	71.2	70.1
65°	69.1	68.6	68.0	67.5	67.0	66.0	65.4	64.4	62.7	61.2	59.6
67.5°	59.1	58.5	58.5	58.1	56.5	55.9	55.9	54.3	52.8	51.1	49.6
70°	49.1	49.1	49.1	48.0	47.5	46.9	46.4	45.4	43.8	42.3	40.6
72.5°	40.6	40.1	40.1	39.6	37.9	37.5	36.9	35.9	34.2	33.3	32.2
75°	31.6	31.6	31.1	30.6	30.0	29.6	29.0	28.0	26.3	24.8	24.3
77.5°	24.3	23.7	23.7	23.2	22.1	21.7	21.7	20.6	19.0	18.0	16.9
80°	16.4	16.9	16.4	15.8	15.3	14.7	14.2	13.8	12.7	11.6	10.5
82.5°	10.1	10.5	10.1	10.1	9.5	9.0	9.0	7.9	7.4	6.8	6.3
85°	5.3	5.3	5.3	5.3	4.8	4.8	4.8	4.2	3.7	3.1	3.1
87.5°	1.6	2.2	1.6	1.6	1.6	1.6	1.6	1.6	1.1	1.1	1.1
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: P583481

CATALOG NUMBER: HC805D010-HM80520840-81RWWC

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	395.1	395.1	395.1	395.1	395.1	395.1	395.1	395.1	395.1	395.1	395.1
2.5°	396.7	396.2	395.6	395.6	395.6	395.6	395.6	395.1	394.5	394.5	394.5
5°	395.6	395.6	395.6	395.1	394.5	394.5	393.6	393.0	392.5	391.9	391.4
7.5°	394.5	393.6	393.0	392.5	391.9	391.9	390.9	389.9	389.9	388.8	387.7
10°	391.4	390.9	389.9	388.8	388.2	387.7	386.6	385.1	384.6	383.5	382.4
12.5°	387.7	386.6	385.6	383.5	382.9	382.4	380.3	378.7	377.7	377.2	374.5
15°	382.9	380.9	379.3	376.7	376.1	375.0	373.5	371.9	369.8	368.2	367.1
17.5°	374.5	372.4	369.8	367.1	366.0	366.0	363.4	361.4	358.7	357.7	355.5
20°	364.5	361.9	359.8	356.6	355.0	353.5	351.8	348.7	346.5	345.0	342.3
22.5°	352.9	349.2	346.5	343.4	340.8	339.2	336.6	334.0	331.3	329.7	327.6
25°	338.2	334.9	330.7	327.6	325.9	323.9	320.7	318.0	315.4	312.8	311.7
27.5°	321.8	317.6	313.9	310.1	308.6	307.0	303.3	300.2	298.1	295.4	294.3
30°	303.8	299.6	295.4	292.2	290.6	288.0	286.0	282.3	279.6	277.5	274.8
32.5°	283.3	280.1	276.4	271.7	270.6	268.5	265.4	263.7	260.6	259.0	256.9
35°	261.1	259.0	255.3	251.6	250.1	249.0	246.3	243.2	241.1	239.5	238.4
37.5°	240.0	237.4	233.7	231.0	229.9	228.4	225.3	223.7	221.6	220.5	218.3
40°	217.4	214.7	212.1	210.4	208.9	207.8	205.8	204.1	202.1	200.5	199.9
42.5°	195.2	193.6	191.5	189.4	188.9	187.2	186.3	184.6	183.0	182.5	181.0
45°	175.1	173.6	171.4	169.4	168.8	167.7	167.2	165.7	164.6	164.6	164.6
47.5°	155.1	153.5	151.4	150.3	150.8	148.8	148.8	148.2	147.2	147.2	147.7
50°	137.2	135.0	134.5	133.5	132.4	131.3	131.9	130.4	130.4	131.3	130.8
52.5°	120.3	118.1	117.7	116.6	116.1	116.1	115.5	115.5	115.0	115.5	115.5
55°	105.0	103.4	102.3	101.3	100.8	100.8	100.8	100.2	99.7	100.8	101.3
57.5°	91.2	90.7	89.7	88.1	87.6	87.0	86.5	86.5	86.5	86.5	87.0
60°	79.1	78.0	77.0	75.4	75.4	74.9	74.3	73.9	73.9	73.9	73.9
62.5°	68.6	67.0	65.4	64.4	63.8	63.3	62.7	61.8	61.8	61.8	61.8
65°	58.1	56.5	55.4	54.3	53.3	53.3	52.2	51.7	50.6	50.2	49.1
67.5°	48.0	46.9	45.8	44.3	43.8	43.2	42.3	41.7	40.1	39.6	39.0
70°	39.0	37.5	36.4	35.3	34.8	33.8	32.7	31.6	30.6	29.6	28.5
72.5°	30.6	29.0	28.0	26.9	25.9	25.9	24.3	23.2	21.7	20.6	19.0
75°	22.6	21.1	20.0	18.4	18.0	17.4	15.8	14.7	13.2	11.6	10.5
77.5°	15.3	14.2	13.2	11.6	10.5	10.5	9.0	7.9	6.8	5.3	4.8
80°	9.5	8.5	7.4	6.3	6.3	5.3	4.8	3.7	2.6	2.2	1.6
82.5°	5.3	4.8	4.2	3.1	3.1	2.6	2.2	1.6	1.1	0.5	0.5
85°	2.6	2.2	1.6	1.6	1.1	1.1	1.1	0.5	0.5	0.0	0.0
87.5°	1.1	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: P583481

CATALOG NUMBER: HC805D010-HM80520840-81RWWC

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	395.1	395.1	395.1	395.1	395.1	395.1	395.1	395.1	395.1	395.1	395.1
2.5°	394.1	394.1	393.6	393.6	393.6	393.0	393.6	393.0	393.0	393.0	393.6
5°	391.9	390.9	390.9	390.3	390.3	389.9	390.3	389.9	389.3	388.8	389.3
7.5°	387.7	386.6	386.2	385.6	385.6	385.6	385.1	384.6	385.1	383.5	384.6
10°	382.0	381.4	380.3	379.8	379.3	379.8	379.3	378.3	378.3	378.3	377.7
12.5°	374.5	373.5	373.0	372.4	371.3	371.3	371.9	370.8	370.8	369.8	369.8
15°	365.6	364.5	363.4	363.4	362.5	362.5	361.9	361.9	361.4	360.8	360.8
17.5°	354.4	352.9	351.8	352.4	351.8	351.3	351.3	350.2	349.8	350.2	350.2
20°	341.3	340.2	339.2	339.7	338.6	338.2	338.6	337.1	337.6	337.6	337.6
22.5°	326.5	325.9	324.4	324.4	323.3	322.8	323.3	323.3	323.9	323.3	323.3
25°	310.1	309.1	308.1	308.1	307.5	307.0	307.5	308.1	307.5	308.1	308.1
27.5°	292.8	291.2	291.2	290.2	290.2	290.6	290.2	290.6	291.2	291.2	292.2
30°	273.8	273.3	272.7	272.2	272.2	272.7	272.7	272.7	273.3	274.4	274.4
32.5°	255.8	254.8	253.8	253.8	254.8	254.2	254.8	254.8	255.8	255.8	256.9
35°	236.3	236.3	235.2	235.8	235.8	235.8	235.8	236.9	238.0	238.4	239.5
37.5°	218.3	216.8	217.4	217.4	217.9	217.4	218.9	218.9	220.0	220.0	221.0
40°	198.8	198.8	199.4	198.8	199.4	199.4	200.5	201.5	202.1	203.1	203.6
42.5°	180.4	181.5	180.4	181.0	181.5	181.9	182.5	183.0	185.2	186.3	187.8
45°	163.5	164.1	164.6	165.1	164.6	165.7	166.1	167.2	168.8	169.4	169.9
47.5°	147.2	147.7	148.2	148.8	148.8	149.9	150.3	151.4	152.5	153.0	153.5
50°	131.3	132.4	133.0	133.0	133.5	134.5	135.6	135.6	136.6	138.3	138.7
52.5°	117.1	117.1	118.1	118.7	119.2	119.2	120.8	121.4	121.9	122.9	124.0
55°	101.3	102.8	103.4	103.4	104.5	105.5	106.1	106.5	106.5	108.7	108.7
57.5°	87.6	88.1	89.2	89.2	89.2	90.7	90.7	91.8	92.3	92.9	93.8
60°	73.9	74.9	74.9	75.4	74.9	76.0	76.5	77.6	78.0	78.6	79.1
62.5°	61.2	61.2	61.8	61.8	61.8	61.8	62.7	62.7	63.8	64.4	64.9
65°	49.1	49.1	49.1	49.1	49.1	49.1	49.1	49.1	49.6	49.6	50.6
67.5°	37.9	37.5	36.4	36.9	36.4	36.4	35.9	35.9	36.4	36.4	37.5
70°	27.4	26.9	25.9	25.9	25.4	24.8	24.3	23.7	23.2	23.2	23.2
72.5°	18.0	16.9	15.3	14.7	14.7	13.8	12.7	12.1	12.1	12.1	12.1
75°	9.0	7.9	6.8	6.3	6.3	5.3	5.7	5.3	5.3	5.3	5.3
77.5°	3.7	2.6	2.2	2.2	2.2	1.6	1.6	1.6	1.6	1.6	1.6
80°	1.1	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: P583481

CATALOG NUMBER: HC805D010-HM80520840-81RWWC

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	395.1	395.1	395.1	395.1	395.1	395.1	395.1	395.1
2.5°	393.0	393.0	391.9	392.5	392.5	392.5	392.5	392.5
5°	388.2	388.8	388.2	388.8	388.8	388.2	388.2	388.2
7.5°	383.5	384.0	383.5	384.0	384.0	384.0	383.5	383.5
10°	377.7	377.7	377.7	377.7	377.7	377.2	377.7	377.7
12.5°	369.8	369.8	369.8	370.4	370.4	369.8	369.8	369.3
15°	361.4	360.3	360.8	361.4	360.8	360.8	360.8	360.8
17.5°	349.8	350.2	349.8	349.8	349.8	349.8	350.2	349.8
20°	337.6	337.6	338.2	337.6	337.6	337.6	337.6	337.1
22.5°	323.9	323.3	323.3	323.9	323.9	323.3	323.9	323.9
25°	308.6	309.1	308.6	308.6	309.1	309.1	309.1	308.6
27.5°	292.2	292.8	293.3	292.8	292.8	292.8	293.3	293.9
30°	275.3	276.4	275.3	275.3	276.4	275.9	276.4	276.4
32.5°	257.5	259.0	258.0	259.0	259.0	259.5	259.0	259.5
35°	239.5	241.1	241.1	241.1	241.6	242.2	242.2	241.6
37.5°	222.6	223.1	223.1	224.2	224.7	225.3	225.3	224.7
40°	205.2	206.2	206.8	206.8	206.8	207.8	208.9	207.8
42.5°	188.3	188.9	189.4	189.4	190.4	190.9	191.5	191.5
45°	172.0	173.0	173.6	174.0	174.6	175.7	175.1	176.2
47.5°	155.1	156.7	157.2	157.8	158.7	159.3	159.8	160.4
50°	139.8	140.9	140.9	141.8	143.5	143.5	144.5	145.1
52.5°	124.5	125.0	125.6	126.0	127.1	128.2	128.2	129.3
55°	109.8	110.2	110.2	110.7	111.3	113.4	114.0	114.0
57.5°	94.4	94.4	95.5	96.0	96.5	97.6	97.6	97.6
60°	79.6	80.2	80.2	80.7	81.3	82.2	82.8	82.2
62.5°	64.9	65.4	65.4	66.0	67.0	67.5	67.0	67.0
65°	51.1	51.7	51.7	52.2	53.3	53.3	52.8	53.3
67.5°	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5
70°	23.7	23.2	22.6	23.2	23.2	23.2	22.6	23.7
72.5°	11.6	12.1	12.1	12.1	12.1	12.1	12.1	11.6
75°	5.3	5.3	4.8	4.8	4.8	5.3	5.3	4.8
77.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
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)