

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: P583498

Luminaire Tested: **HC805D010-HM80520927-81RWWC**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P583498
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-HM80520927-81RWWC
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WALLWASH DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 548.5 lumens
Efficiency: N/A
Efficacy: 91.4 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

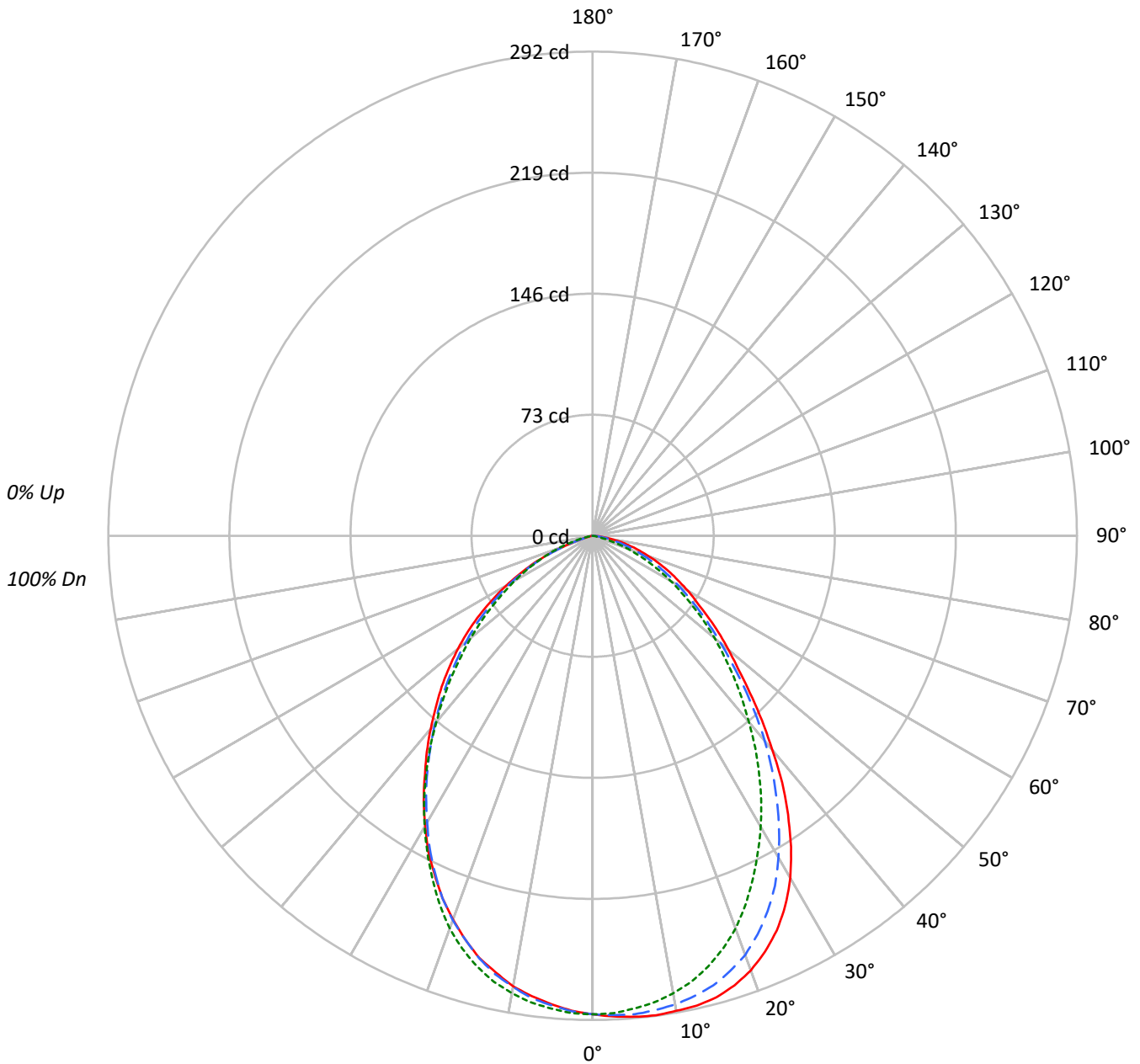
Input Watts (W): 6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P583498

CATALOG NUMBER: HC805D010-HM80520927-81RWWC

Luminous Intensity Polar Plot





TEST NUMBER: P583498

CATALOG NUMBER: HC805D010-HM80520927-81RWWC

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20	
RC	80				70				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				100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	84	82	79	77				77
3	95	86	79	73	93	84	78	73	82	76	72	79	74	70	76	73	69	67				67
4	88	77	70	64	86	76	69	64	74	68	63	72	66	62	69	65	61	59				59
5	81	70	62	56	80	69	62	56	67	61	56	65	59	55	63	58	54	52				52
6	76	64	56	50	74	63	55	50	61	55	50	60	54	49	58	53	49	47				47
7	71	59	51	45	69	58	50	45	56	50	45	55	49	44	54	48	44	42				42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				38
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35				35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32				32

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	8899	8899	8899
5°	9014	8859	8779
10°	9109	8770	8639
15°	9201	8588	8415
20°	9152	8269	8079
25°	8938	7775	7669
30°	8489	7217	7189
35°	7732	6584	6640
40°	6779	5893	6111
45°	5848	5242	5612
50°	5123	4601	5080
55°	4537	3957	4473
60°	4089	3330	3707
65°	3685	2671	2838
70°	3228	1938	1569
75°	2752	1013	417
80°	2131	284	71
85°	1344	0	0



TEST NUMBER: P583498

CATALOG NUMBER: HC805D010-HM80520927-81RWWC

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.2	5.0
10°-20°	76.5	14.0
20°-30°	108.6	19.8
30°-40°	114.4	20.9
40°-50°	97.3	17.7
50°-60°	70.3	12.8
60°-70°	40.0	7.3
70°-80°	12.6	2.3
80°-90°	1.5	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°	212.4	38.7
0°-40°	326.8	59.6
0°-60°	494.3	90.1
0°-90°	548.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	548.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	289	289	289	289	289	
5°	291	290	286	284	284	28
15°	288	281	269	264	264	81
25°	263	250	228	225	225	120
35°	205	193	175	174	176	128
45°	134	129	120	123	129	104
55°	84	78	74	78	83	76
65°	50	44	37	36	39	50
75°	23	18	8	4	4	25
85°	4	2	0	0	0	5
90°	0	0	0	0	0	



TEST NUMBER: P583498

CATALOG NUMBER: HC805D010-HM80520927-81RWWC

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	288.6	288.6	288.6	288.6	288.6	288.6	288.6	288.6	288.6	288.6	288.6
2.5°	290.2	290.5	289.7	289.7	290.5	289.7	290.2	290.2	289.7	289.7	289.3
5°	291.2	290.9	290.9	290.9	291.2	290.5	290.2	290.5	289.7	289.7	289.7
7.5°	291.7	291.7	291.2	290.9	290.9	290.9	290.5	290.2	289.7	289.0	288.6
10°	290.9	290.9	291.2	290.5	290.5	289.7	289.7	289.0	289.0	288.2	287.0
12.5°	290.2	289.7	289.7	289.0	289.0	288.2	288.2	287.0	286.7	285.5	284.3
15°	288.2	287.8	287.0	286.7	286.2	285.8	285.1	284.8	283.6	282.0	280.8
17.5°	284.3	283.9	283.6	282.9	282.0	281.7	281.3	280.1	278.5	277.3	275.4
20°	278.9	278.5	278.5	277.3	277.0	275.9	275.4	273.9	272.8	270.5	269.0
22.5°	271.6	272.0	271.2	270.5	269.7	268.5	267.8	266.2	264.3	262.0	260.1
25°	262.7	263.1	262.4	261.5	260.5	259.6	258.9	256.6	254.7	252.0	249.7
27.5°	251.6	251.6	251.6	250.8	248.9	248.5	247.8	245.4	242.8	240.4	238.1
30°	238.4	238.1	238.1	237.0	236.2	234.6	233.5	231.5	229.6	227.0	224.2
32.5°	222.6	223.1	221.9	221.2	220.0	220.0	218.5	216.9	214.6	211.9	209.2
35°	205.4	205.8	204.9	204.6	202.7	202.3	201.9	200.0	198.5	196.5	193.4
37.5°	187.7	187.2	186.9	186.9	185.7	184.9	184.2	183.0	180.7	179.2	177.6
40°	168.4	168.4	168.4	167.9	167.6	166.9	166.4	165.7	164.1	162.6	161.5
42.5°	151.1	151.1	150.7	150.2	149.5	149.9	149.1	148.3	146.8	145.7	144.8
45°	134.1	134.1	134.1	134.4	133.7	132.5	132.5	131.8	131.0	130.2	129.0
47.5°	119.1	120.2	119.5	119.1	119.5	117.9	117.9	117.1	116.3	115.6	114.1
50°	106.8	106.8	106.8	105.9	105.6	105.6	104.4	103.7	103.3	102.5	100.9
52.5°	95.5	94.8	94.8	94.4	94.0	93.2	93.2	92.4	91.0	90.1	89.1
55°	84.4	84.4	84.0	83.6	83.2	82.8	82.5	81.3	80.6	79.4	78.2
57.5°	74.3	75.2	74.7	74.0	73.3	73.3	72.4	71.7	70.5	69.3	68.2
60°	66.3	65.8	65.8	65.5	64.8	64.4	63.9	62.8	61.6	60.4	59.4
62.5°	57.8	57.8	57.8	57.0	56.3	55.9	55.4	54.7	53.1	52.1	51.2
65°	50.5	50.0	49.7	49.3	49.0	48.1	47.8	47.0	45.8	44.6	43.6
67.5°	43.1	42.7	42.7	42.4	41.2	40.8	40.8	39.7	38.5	37.3	36.3
70°	35.8	35.8	35.8	35.1	34.7	34.2	33.9	33.2	32.0	30.8	29.7
72.5°	29.7	29.3	29.3	28.8	27.8	27.4	26.9	26.2	25.0	24.3	23.5
75°	23.1	23.1	22.7	22.4	21.9	21.5	21.2	20.5	19.3	18.1	17.7
77.5°	17.7	17.4	17.4	17.0	16.2	15.8	15.8	15.1	13.9	13.0	12.3
80°	12.0	12.3	12.0	11.6	11.1	10.8	10.4	10.1	9.2	8.5	7.7
82.5°	7.3	7.7	7.3	7.3	6.9	6.6	6.6	5.7	5.4	5.0	4.7
85°	3.8	3.8	3.8	3.8	3.5	3.5	3.5	3.1	2.8	2.3	2.3
87.5°	1.2	1.6	1.2	1.2	1.2	1.2	1.2	1.2	0.7	0.7	0.7
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: P583498

CATALOG NUMBER: HC805D010-HM80520927-81RWWC

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	288.6	288.6	288.6	288.6	288.6	288.6	288.6	288.6	288.6	288.6	288.6
2.5°	289.7	289.3	289.0	289.0	289.0	289.0	289.0	288.6	288.2	288.2	288.2
5°	289.0	289.0	289.0	288.6	288.2	288.2	287.4	287.0	286.7	286.2	285.8
7.5°	288.2	287.4	287.0	286.7	286.2	286.2	285.5	284.8	284.8	283.9	283.2
10°	285.8	285.5	284.8	283.9	283.6	283.2	282.4	281.3	280.8	280.1	279.4
12.5°	283.2	282.4	281.7	280.1	279.7	279.4	277.8	276.6	275.9	275.4	273.5
15°	279.7	278.2	277.0	275.1	274.7	273.9	272.8	271.6	270.0	269.0	268.1
17.5°	273.5	272.0	270.0	268.1	267.4	267.4	265.5	263.9	262.0	261.2	259.6
20°	266.2	264.3	262.7	260.5	259.3	258.2	257.0	254.7	253.2	252.0	250.1
22.5°	257.7	255.1	253.2	250.8	248.9	247.8	245.9	243.8	241.9	240.8	239.3
25°	246.9	244.7	241.6	239.3	238.1	236.5	234.3	232.3	230.4	228.5	227.7
27.5°	235.0	232.0	229.2	226.6	225.4	224.2	221.6	219.2	217.7	215.7	215.0
30°	221.9	218.8	215.7	213.4	212.3	210.3	208.9	206.1	204.2	202.7	200.7
32.5°	206.8	204.6	201.9	198.5	197.6	196.1	193.8	192.6	190.3	189.1	187.7
35°	190.7	189.1	186.5	183.7	182.7	181.8	179.9	177.6	176.1	174.9	174.2
37.5°	175.4	173.3	170.7	168.8	167.9	166.9	164.5	163.4	161.8	161.0	159.6
40°	158.7	156.8	154.9	153.7	152.6	151.8	150.2	149.1	147.6	146.4	146.0
42.5°	142.6	141.4	139.8	138.4	137.9	136.8	136.0	134.9	133.7	133.3	132.1
45°	128.0	126.8	125.2	123.7	123.3	122.6	122.1	121.0	120.2	120.2	120.2
47.5°	113.2	112.2	110.6	109.8	110.2	108.7	108.7	108.2	107.5	107.5	107.8
50°	100.2	98.6	98.3	97.4	96.7	95.9	96.4	95.2	95.2	95.9	95.5
52.5°	87.9	86.3	85.9	85.1	84.7	84.7	84.4	84.4	84.0	84.4	84.4
55°	76.7	75.5	74.7	74.0	73.6	73.6	73.6	73.3	72.8	73.6	74.0
57.5°	66.7	66.3	65.5	64.4	63.9	63.6	63.2	63.2	63.2	63.2	63.6
60°	57.8	57.0	56.3	55.1	55.1	54.7	54.3	54.0	54.0	54.0	54.0
62.5°	50.0	49.0	47.8	47.0	46.6	46.2	45.8	45.1	45.1	45.1	45.1
65°	42.4	41.2	40.5	39.7	38.9	38.9	38.2	37.7	37.0	36.6	35.8
67.5°	35.1	34.2	33.5	32.3	32.0	31.6	30.8	30.4	29.3	28.8	28.5
70°	28.5	27.4	26.6	25.9	25.4	24.7	23.9	23.1	22.4	21.5	20.8
72.5°	22.4	21.2	20.5	19.6	18.9	18.9	17.7	17.0	15.8	15.1	13.9
75°	16.5	15.4	14.6	13.5	13.0	12.7	11.6	10.8	9.6	8.5	7.7
77.5°	11.1	10.4	9.6	8.5	7.7	7.7	6.6	5.7	5.0	3.8	3.5
80°	6.9	6.1	5.4	4.7	4.7	3.8	3.5	2.8	1.9	1.6	1.2
82.5°	3.8	3.5	3.1	2.3	2.3	1.9	1.6	1.2	0.7	0.4	0.4
85°	1.9	1.6	1.2	1.2	0.7	0.7	0.7	0.4	0.4	0.0	0.0
87.5°	0.7	0.4	0.4	0.4	0.4	0.4	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: P583498

CATALOG NUMBER: HC805D010-HM80520927-81RWWC

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	288.6	288.6	288.6	288.6	288.6	288.6	288.6	288.6	288.6	288.6	288.6
2.5°	287.8	287.8	287.4	287.4	287.4	287.0	287.4	287.0	287.0	287.0	287.4
5°	286.2	285.5	285.5	285.1	285.1	284.8	285.1	284.8	284.3	283.9	284.3
7.5°	283.2	282.4	282.0	281.7	281.7	281.7	281.3	280.8	281.3	280.1	280.8
10°	278.9	278.5	277.8	277.3	277.0	277.3	277.0	276.3	276.3	276.3	275.9
12.5°	273.5	272.8	272.4	272.0	271.2	271.2	271.6	270.9	270.9	270.0	270.0
15°	267.1	266.2	265.5	265.5	264.7	264.7	264.3	264.3	263.9	263.6	263.6
17.5°	258.9	257.7	257.0	257.4	257.0	256.6	256.6	255.8	255.4	255.8	255.8
20°	249.3	248.5	247.8	248.1	247.3	246.9	247.3	246.2	246.6	246.6	246.6
22.5°	238.4	238.1	237.0	237.0	236.2	235.8	236.2	236.2	236.5	236.2	236.2
25°	226.6	225.8	225.0	225.0	224.7	224.2	224.7	225.0	224.7	225.0	225.0
27.5°	213.8	212.7	212.7	211.9	211.9	212.3	211.9	212.3	212.7	212.7	213.4
30°	200.0	199.5	199.2	198.8	198.8	199.2	199.2	199.2	199.5	200.4	200.4
32.5°	186.9	186.1	185.3	185.3	186.1	185.7	186.1	186.1	186.9	186.9	187.7
35°	172.6	172.6	171.9	172.2	172.2	172.2	172.2	173.0	173.8	174.2	174.9
37.5°	159.6	158.4	158.7	158.7	159.1	158.7	159.9	159.9	160.6	160.6	161.5
40°	145.2	145.2	145.7	145.2	145.7	145.7	146.4	147.2	147.6	148.3	148.7
42.5°	131.8	132.5	131.8	132.1	132.5	132.9	133.3	133.7	135.3	136.0	137.2
45°	119.5	119.8	120.2	120.5	120.2	121.0	121.4	122.1	123.3	123.7	124.0
47.5°	107.5	107.8	108.2	108.7	108.7	109.4	109.8	110.6	111.3	111.7	112.2
50°	95.9	96.7	97.1	97.1	97.4	98.3	99.0	99.0	99.8	100.9	101.4
52.5°	85.6	85.6	86.3	86.7	87.0	87.0	88.2	88.6	89.1	89.8	90.5
55°	74.0	75.2	75.5	75.5	76.2	77.1	77.4	77.8	77.8	79.4	79.4
57.5°	63.9	64.4	65.1	65.1	65.1	66.3	66.3	67.0	67.4	67.8	68.6
60°	54.0	54.7	54.7	55.1	54.7	55.4	55.9	56.6	57.0	57.5	57.8
62.5°	44.6	44.6	45.1	45.1	45.1	45.1	45.8	45.8	46.6	47.0	47.4
65°	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	36.3	36.3	37.0
67.5°	27.8	27.4	26.6	26.9	26.6	26.6	26.2	26.2	26.6	26.6	27.4
70°	20.0	19.6	18.9	18.9	18.4	18.1	17.7	17.4	17.0	17.0	17.0
72.5°	13.0	12.3	11.1	10.8	10.8	10.1	9.2	8.9	8.9	8.9	8.9
75°	6.6	5.7	5.0	4.7	4.7	3.8	4.2	3.8	3.8	3.8	3.8
77.5°	2.8	1.9	1.6	1.6	1.6	1.2	1.2	1.2	1.2	1.2	1.2
80°	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
82.5°	0.4	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: P583498

CATALOG NUMBER: HC805D010-HM80520927-81RWWC

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	288.6	288.6	288.6	288.6	288.6	288.6	288.6	288.6
2.5°	287.0	287.0	286.2	286.7	286.7	286.7	286.7	286.7
5°	283.6	283.9	283.6	283.9	283.9	283.6	283.6	283.6
7.5°	280.1	280.5	280.1	280.5	280.5	280.5	280.1	280.1
10°	275.9	275.9	275.9	275.9	275.9	275.4	275.9	275.9
12.5°	270.0	270.0	270.0	270.5	270.5	270.0	270.0	269.7
15°	263.9	263.1	263.6	263.9	263.6	263.6	263.6	263.6
17.5°	255.4	255.8	255.4	255.4	255.4	255.4	255.8	255.4
20°	246.6	246.6	246.9	246.6	246.6	246.6	246.6	246.2
22.5°	236.5	236.2	236.2	236.5	236.5	236.2	236.5	236.5
25°	225.4	225.8	225.4	225.4	225.8	225.8	225.8	225.4
27.5°	213.4	213.8	214.3	213.8	213.8	213.8	214.3	214.6
30°	201.1	201.9	201.1	201.1	201.9	201.5	201.9	201.9
32.5°	188.0	189.1	188.4	189.1	189.1	189.6	189.1	189.6
35°	174.9	176.1	176.1	176.1	176.4	176.8	176.8	176.4
37.5°	162.6	163.0	163.0	163.7	164.1	164.5	164.5	164.1
40°	149.9	150.7	151.1	151.1	151.1	151.8	152.6	151.8
42.5°	137.5	137.9	138.4	138.4	139.1	139.5	139.8	139.8
45°	125.6	126.4	126.8	127.1	127.5	128.3	128.0	128.7
47.5°	113.2	114.4	114.8	115.2	116.0	116.3	116.7	117.1
50°	102.1	102.8	102.8	103.7	104.7	104.7	105.6	105.9
52.5°	91.0	91.3	91.7	92.0	92.9	93.6	93.6	94.4
55°	80.1	80.6	80.6	80.9	81.3	82.8	83.2	83.2
57.5°	68.9	68.9	69.8	70.1	70.5	71.2	71.2	71.2
60°	58.2	58.5	58.5	58.9	59.4	60.1	60.4	60.1
62.5°	47.4	47.8	47.8	48.1	49.0	49.3	49.0	49.0
65°	37.3	37.7	37.7	38.2	38.9	38.9	38.5	38.9
67.5°	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4
70°	17.4	17.0	16.5	17.0	17.0	17.0	16.5	17.4
72.5°	8.5	8.9	8.9	8.9	8.9	8.9	8.9	8.5
75°	3.8	3.8	3.5	3.5	3.5	3.8	3.8	3.5
77.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
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)