

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P879343

Luminaire Tested: **LD4C08D010 EU4089035 4LBDWWLI**

Issue Date: 10/1/2024

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P879343
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C08D010 EU4089035 4LBDWWLI
Description: 4 INCH 800 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS AND 4LBDWW TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

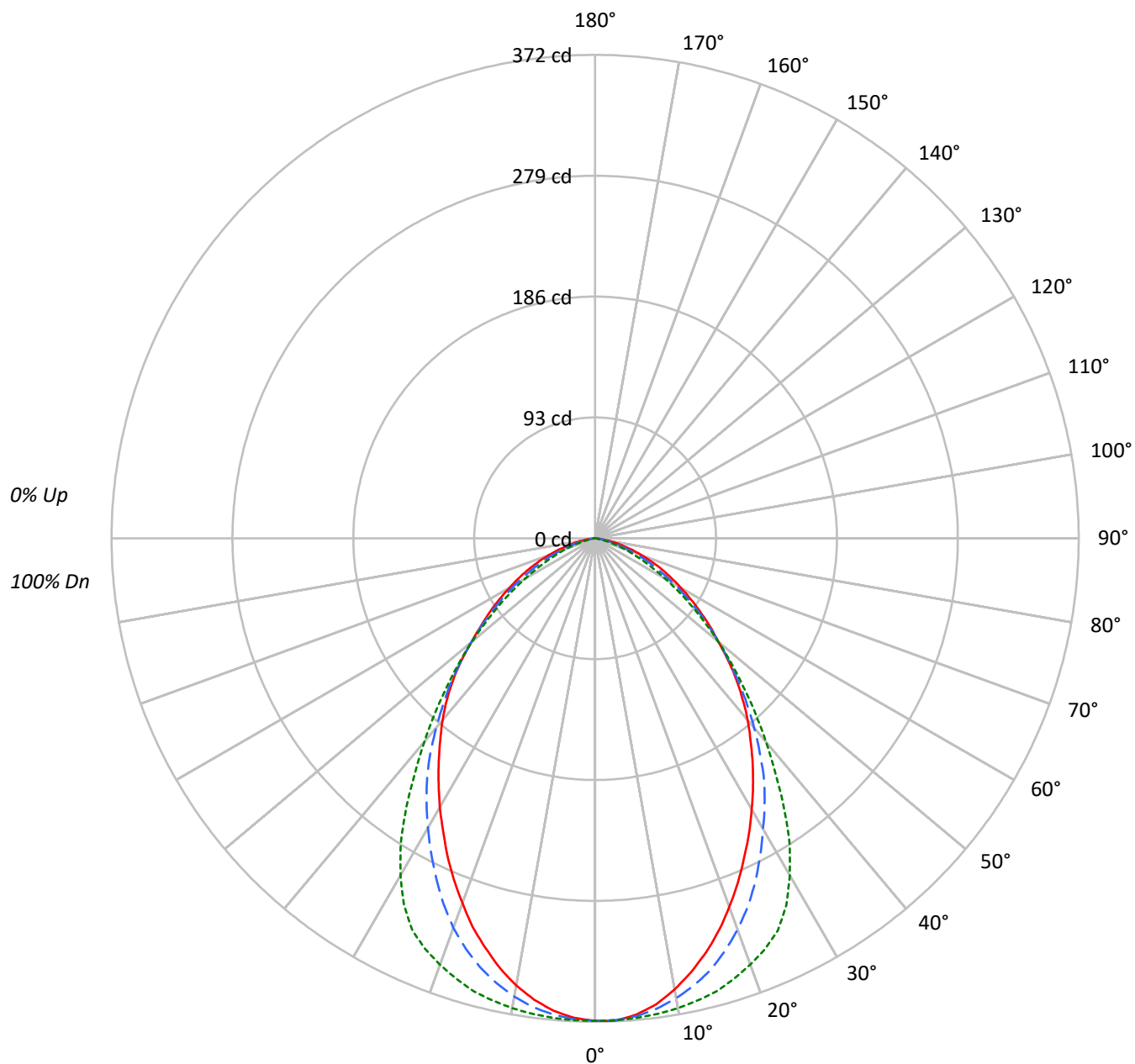
Lumens per Lamp: N/A
Luminaire Lumens: 682.0 lumens
Efficiency: N/A
Efficacy: 69.1 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.19 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 9.87
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: P879343

CATALOG NUMBER: LD4C08D010 EU4089035 4LBLDWWLI

Luminous Intensity Polar Plot





TEST NUMBER: P879343

CATALOG NUMBER: LD4C08D010 EU4089035 4LBLDWWLI

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	111	107	104	101	108	105	102	99		101	98	96		97	95	93		93	92	90
2	103	96	90	85	100	94	89	84		91	86	83		87	84	81		85	82	79
3	95	86	79	74	93	84	78	73		82	76	72		79	74	70		77	73	69
4	88	78	70	64	86	76	69	64		74	68	63		72	66	62		70	65	61
5	82	70	62	57	80	69	62	56		67	61	56		65	60	55		64	59	55
6	76	64	56	50	74	63	56	50		61	55	50		60	54	49		58	53	49
7	71	59	51	45	69	58	50	45		56	50	45		55	49	45		54	48	44
8	66	54	46	41	65	53	46	41		52	45	41		51	45	40		50	44	40
9	62	50	42	37	61	49	42	37		48	42	37		47	41	37		46	41	37
10	59	46	39	34	57	46	39	34		45	39	34		44	38	34		43	38	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	45615	45615	45615
5°	45346	45691	45013
10°	43974	45808	43587
15°	41946	45902	41488
20°	39470	45641	39038
25°	36762	45099	36464
30°	34160	42473	33890
35°	31675	37989	31450
40°	29284	32764	29268
45°	26687	27972	26895
50°	23566	23642	23700
55°	21119	19341	21205
60°	18674	15357	18698
65°	16424	11715	16279
70°	13614	8369	13614
75°	10633	4794	10205
80°	6863	1203	6580
85°	2537	423	1973



TEST NUMBER: P879343

CATALOG NUMBER: LD4C08D010 EU4089035 4LBLDWWLI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.9	5.1
10°-20°	96.4	14.1
20°-30°	134.8	19.8
30°-40°	142.2	20.9
40°-50°	121.0	17.7
50°-60°	85.4	12.5
60°-70°	48.4	7.1
70°-80°	17.3	2.5
80°-90°	1.7	0.2
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°	266.1	39.0
0°-40°	408.3	59.9
0°-60°	614.7	90.1
0°-90°	682.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	682.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	371	371	371	371	371	
5°	368	369	370	368	365	35
15°	330	344	361	342	326	92
25°	271	292	333	289	269	125
35°	211	226	253	225	210	132
45°	154	156	161	156	155	118
55°	99	95	90	96	99	89
65°	56	48	40	49	56	56
75°	22	15	10	15	22	24
85°	2	1	0	1	1	3
90°	0	0	0	0	0	



TEST NUMBER: P879343

CATALOG NUMBER: LD4C08D010 EU4089035 4LBLDWWLI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	371.3	371.3	371.3	371.3	371.3	371.3	371.3	371.3	371.3	371.3	371.3
2.5°	371.6	370.9	370.9	370.9	370.9	370.9	370.9	370.9	370.9	371.1	371.1
5°	367.7	367.5	367.3	367.3	367.3	367.3	367.5	368.0	368.3	368.7	369.0
7.5°	361.6	361.1	361.3	361.3	361.6	361.9	362.3	362.9	363.7	364.3	365.0
10°	352.5	351.9	352.6	352.9	353.7	354.1	354.8	355.7	357.3	358.2	359.3
12.5°	341.8	341.5	341.8	342.9	343.7	344.3	345.1	346.9	348.6	350.4	352.3
15°	329.8	329.1	329.5	330.9	332.3	333.3	334.0	336.3	338.6	341.3	343.7
17.5°	316.5	315.5	316.6	317.7	319.5	320.4	321.4	324.0	327.0	330.1	332.7
20°	301.9	301.6	302.3	303.9	305.7	306.8	307.6	310.5	313.2	317.3	320.4
22.5°	286.8	287.0	287.6	289.3	290.5	292.0	293.3	295.9	299.0	302.9	306.8
25°	271.2	271.6	272.6	273.7	275.8	276.6	278.2	280.9	283.6	287.2	291.5
27.5°	256.2	256.4	257.5	258.0	260.0	261.8	262.5	265.4	268.4	271.2	275.0
30°	240.8	241.2	241.9	243.4	245.4	246.1	246.9	249.6	251.9	255.4	258.3
32.5°	226.1	225.8	226.6	227.5	229.7	230.9	231.4	234.4	236.5	240.0	242.7
35°	211.2	210.5	211.8	212.6	214.6	215.7	216.2	218.6	220.5	223.4	226.5
37.5°	196.4	196.9	197.5	198.2	199.1	199.4	201.1	201.6	204.1	206.4	208.0
40°	182.6	182.3	182.1	182.8	184.0	184.6	184.7	186.2	186.8	189.0	190.3
42.5°	167.9	168.0	167.9	168.0	168.7	168.7	169.1	170.1	170.5	171.2	172.8
45°	153.6	153.6	153.2	153.3	153.5	153.3	153.5	153.9	154.7	154.7	155.8
47.5°	138.7	138.5	139.0	138.6	138.3	138.2	138.6	138.2	139.0	139.0	139.3
50°	123.3	123.3	124.0	123.9	124.2	123.6	123.7	123.7	123.9	123.7	124.3
52.5°	111.4	111.1	110.8	110.1	110.4	109.8	109.8	110.0	109.6	109.4	108.7
55°	98.6	98.9	98.5	98.2	98.2	97.6	97.5	96.7	96.1	95.7	95.3
57.5°	87.1	87.4	87.2	86.5	85.7	85.8	85.5	84.7	83.5	82.6	81.9
60°	76.0	76.2	76.0	75.3	75.0	74.4	74.3	73.2	72.2	71.1	70.3
62.5°	66.0	66.0	65.8	64.9	64.2	64.3	63.6	62.8	61.5	60.0	58.7
65°	56.5	56.4	55.7	55.3	54.7	54.0	53.6	52.4	51.4	50.1	48.5
67.5°	47.1	46.7	46.4	46.0	44.7	44.6	44.0	42.9	41.5	40.6	39.2
70°	37.9	37.8	37.2	37.2	36.2	35.8	35.0	34.0	32.8	31.4	30.3
72.5°	30.0	29.7	29.2	28.6	27.8	27.5	26.8	25.8	24.7	23.3	21.9
75°	22.4	22.1	21.9	21.2	20.6	19.9	19.6	18.6	17.5	16.5	15.3
77.5°	15.7	15.4	15.0	14.6	14.2	13.7	13.3	12.5	11.5	10.7	9.6
80°	9.7	9.4	9.2	9.0	8.6	8.5	7.9	7.5	6.7	6.1	5.4
82.5°	5.0	5.0	4.7	4.6	4.3	4.2	4.0	3.6	3.2	2.8	2.4
85°	1.8	1.8	1.7	1.5	1.5	1.4	1.4	1.2	1.0	1.0	0.7
87.5°	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	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: P879343

CATALOG NUMBER: LD4C08D010 EU4089035 4LBLDWWLI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	371.3	371.3	371.3	371.3	371.3	371.3	371.3	371.3	371.3	371.3	371.3
2.5°	371.2	371.1	371.2	371.2	371.3	371.3	371.3	371.2	371.3	371.2	371.2
5°	369.0	369.4	369.7	370.0	370.1	370.2	370.2	370.4	370.5	370.5	370.4
7.5°	365.5	366.3	367.2	367.7	368.0	368.3	368.7	369.0	369.3	369.1	369.0
10°	360.9	362.3	363.4	364.5	365.1	365.5	366.2	366.8	367.0	367.2	366.8
12.5°	354.4	356.3	358.2	360.0	360.8	361.3	362.7	363.7	364.3	364.3	363.8
15°	346.2	349.0	351.6	354.0	355.4	356.2	358.3	359.7	360.5	360.9	360.2
17.5°	336.3	339.5	342.7	345.8	347.2	348.4	351.3	353.3	355.1	355.4	354.5
20°	323.7	327.7	331.3	335.1	336.6	338.6	341.9	345.1	347.9	349.1	346.8
22.5°	309.5	314.0	317.3	321.9	324.0	326.1	330.4	334.4	339.3	341.9	337.7
25°	294.8	298.6	302.6	307.0	310.0	312.2	317.2	322.3	328.8	332.7	326.9
27.5°	279.0	282.3	287.2	292.0	294.3	297.0	303.0	308.6	314.8	318.3	314.0
30°	262.6	266.8	271.4	275.8	279.0	281.6	286.5	291.2	296.5	299.4	296.2
32.5°	246.4	250.4	254.3	259.1	260.9	263.3	267.6	271.6	275.7	278.3	274.6
35°	229.3	232.9	236.5	239.8	240.7	243.4	246.9	249.3	251.2	253.3	250.8
37.5°	210.7	213.4	215.3	218.9	220.3	220.7	223.4	225.1	227.2	227.6	227.5
40°	191.8	194.3	195.8	198.0	199.1	199.1	201.1	202.6	204.1	204.3	204.1
42.5°	174.1	175.4	176.6	178.0	177.8	179.4	180.3	181.0	182.1	182.1	182.3
45°	156.4	157.3	158.5	158.7	159.8	159.8	160.5	160.8	161.4	161.0	160.4
47.5°	139.8	140.3	140.4	141.6	141.9	141.0	141.8	141.9	141.8	141.8	141.5
50°	124.2	124.4	124.3	123.9	124.0	124.4	124.0	123.5	123.7	123.7	124.0
52.5°	108.9	108.3	108.0	108.0	107.5	107.5	106.8	106.5	106.4	105.8	106.5
55°	94.8	94.0	92.8	92.5	92.1	91.9	91.1	90.4	90.1	90.3	90.1
57.5°	81.4	80.1	79.3	79.0	78.6	77.8	76.8	76.1	76.0	75.7	75.7
60°	69.2	67.8	66.5	65.3	65.4	64.9	63.9	63.5	63.0	62.5	62.9
62.5°	58.0	56.5	55.1	53.9	53.0	52.6	51.9	51.2	50.8	50.4	51.0
65°	47.1	45.8	44.3	43.1	42.6	42.2	41.5	40.4	40.3	40.3	40.6
67.5°	37.2	35.8	34.4	33.6	33.1	32.5	32.2	31.7	31.2	31.0	31.1
70°	28.6	27.2	26.1	25.3	24.9	24.7	23.7	23.6	23.5	23.3	23.2
72.5°	20.8	19.7	18.7	18.2	17.6	17.2	16.9	16.5	16.4	16.4	16.4
75°	14.3	13.5	12.4	11.7	11.4	11.0	10.6	10.3	10.0	10.1	10.1
77.5°	8.6	7.8	7.1	6.5	6.4	6.0	5.6	5.3	4.9	4.9	5.0
80°	4.7	4.0	3.5	3.1	2.8	2.6	2.2	2.1	1.8	1.7	1.7
82.5°	2.1	1.7	1.4	1.2	1.1	1.0	0.8	0.7	0.7	0.6	0.7
85°	0.7	0.6	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
87.5°	0.1	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: P879343

CATALOG NUMBER: LD4C08D010 EU4089035 4LBLDWWLI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	371.3	371.3	371.3	371.3	371.3	371.3	371.3	371.3	371.3	371.3	371.3
2.5°	371.1	371.1	370.9	370.9	370.9	370.7	370.7	370.5	370.4	370.2	370.0
5°	370.1	370.0	369.7	369.5	369.4	369.0	368.6	368.3	367.9	367.3	367.0
7.5°	368.7	368.3	367.7	367.5	367.0	366.1	365.4	364.7	364.0	363.0	361.9
10°	366.3	365.5	364.7	364.1	363.4	362.2	360.8	359.7	358.2	356.8	355.2
12.5°	363.0	362.0	360.4	359.5	358.7	356.9	355.1	352.7	350.7	348.7	346.9
15°	358.8	357.0	355.1	354.0	352.7	349.8	347.0	344.5	341.8	339.4	336.5
17.5°	352.7	350.1	347.3	346.1	344.4	341.1	337.7	334.3	331.1	328.2	324.5
20°	343.6	340.7	337.0	335.1	333.7	329.3	326.1	322.2	318.9	315.2	311.2
22.5°	332.9	328.8	324.8	322.0	320.5	316.1	311.8	308.3	304.7	300.5	297.6
25°	320.8	315.8	310.9	308.2	305.8	301.1	296.9	293.3	288.9	285.2	282.3
27.5°	307.2	301.5	295.8	293.0	290.8	285.7	281.2	277.5	273.2	270.0	266.9
30°	290.9	285.8	280.4	278.2	275.5	270.2	265.1	261.8	257.1	253.7	250.4
32.5°	270.7	267.3	263.0	260.0	258.6	253.7	249.4	245.4	241.4	238.7	235.4
35°	248.4	245.5	241.9	240.2	238.4	235.4	231.9	228.4	225.3	222.8	219.7
37.5°	225.9	223.0	220.8	219.0	217.9	215.1	213.0	210.4	208.2	205.8	204.1
40°	202.6	201.8	199.4	198.6	198.3	195.3	193.4	191.4	190.0	188.6	187.6
42.5°	181.9	180.5	178.7	178.9	178.0	176.4	175.1	173.7	172.8	172.1	171.1
45°	161.5	160.4	159.6	160.3	158.9	158.3	157.3	157.2	156.5	155.3	154.8
47.5°	142.1	141.9	142.1	141.6	141.4	141.1	141.2	140.5	139.8	139.4	138.9
50°	124.3	124.4	124.7	125.1	124.2	124.6	124.4	124.3	124.3	123.9	124.2
52.5°	107.1	107.2	107.5	107.9	108.0	108.0	108.5	108.7	109.3	110.0	110.0
55°	90.8	91.8	92.4	93.0	92.6	93.5	93.9	95.1	95.5	95.5	96.1
57.5°	76.4	77.4	77.8	78.6	78.9	79.6	80.7	81.4	82.4	83.2	84.0
60°	63.2	63.6	64.7	66.0	65.7	67.4	68.2	69.3	70.5	71.1	72.2
62.5°	51.4	51.9	52.8	53.2	54.2	55.0	56.9	58.0	59.2	60.5	61.7
65°	40.8	41.4	42.2	43.1	43.5	44.7	45.7	47.6	48.6	50.1	51.4
67.5°	31.2	32.1	32.8	33.3	33.6	34.9	36.4	37.2	39.0	40.6	41.5
70°	23.3	24.0	24.9	24.7	25.3	26.2	27.4	28.6	30.0	31.4	32.5
72.5°	16.2	16.9	17.5	17.6	18.2	18.9	19.7	20.7	21.8	23.2	24.7
75°	10.3	10.4	11.0	11.2	11.5	12.4	13.1	14.0	15.0	16.1	17.1
77.5°	5.1	5.6	5.8	6.1	6.2	6.9	7.6	8.5	9.3	10.4	11.4
80°	1.9	2.1	2.5	2.6	2.9	3.3	3.9	4.3	5.0	5.8	6.4
82.5°	0.7	0.8	1.0	1.0	1.1	1.4	1.5	1.9	2.4	2.6	2.9
85°	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.6	0.7	0.8	0.8
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: P879343

CATALOG NUMBER: LD4C08D010 EU4089035 4LBLDWWLI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	371.3	371.3	371.3	371.3	371.3	371.3	371.3	371.3
2.5°	369.8	369.8	369.7	369.5	369.5	369.5	369.4	369.4
5°	366.5	366.1	365.9	365.7	365.5	365.4	365.0	365.0
7.5°	361.1	360.5	360.1	359.7	359.1	358.7	358.7	358.2
10°	353.8	352.7	352.2	351.6	350.9	350.1	349.8	349.4
12.5°	345.1	342.9	342.3	341.3	340.2	339.7	338.7	338.7
15°	334.3	331.9	330.7	330.1	328.7	327.7	327.3	326.2
17.5°	321.6	319.8	317.9	317.0	315.5	314.3	313.7	313.6
20°	308.9	305.9	304.7	303.4	301.6	300.5	299.7	298.6
22.5°	294.1	291.5	289.7	288.9	287.3	285.4	284.0	284.0
25°	278.6	276.2	275.2	273.4	271.6	270.9	269.3	269.0
27.5°	263.7	261.4	259.4	258.4	256.4	255.4	254.0	253.4
30°	248.3	245.5	244.1	244.0	241.5	240.5	239.4	238.9
32.5°	232.9	230.5	229.1	228.3	227.2	225.5	224.6	224.0
35°	217.6	216.1	214.8	213.9	212.1	211.2	210.4	209.7
37.5°	201.6	200.3	199.7	198.9	198.0	196.5	196.2	195.7
40°	186.2	184.4	184.4	183.9	183.0	182.9	182.5	182.5
42.5°	170.1	169.3	169.1	169.3	168.7	168.5	168.0	169.0
45°	154.1	154.6	153.9	154.0	153.7	154.3	154.3	154.8
47.5°	139.4	138.9	139.2	139.4	139.8	139.8	139.7	139.6
50°	123.7	124.3	124.8	124.2	124.4	124.6	123.9	124.0
52.5°	110.3	110.4	110.8	110.4	110.8	110.7	111.0	110.4
55°	97.2	97.2	97.8	97.9	98.0	98.5	98.6	99.0
57.5°	84.6	85.3	86.0	85.8	86.4	86.9	86.5	86.9
60°	73.6	74.2	74.9	75.1	75.5	75.8	75.8	76.1
62.5°	62.5	63.6	64.2	64.7	64.7	65.3	65.8	66.0
65°	52.5	53.7	54.2	54.6	54.9	55.4	56.1	56.0
67.5°	43.1	43.9	44.4	44.7	45.6	45.8	46.4	46.9
70°	33.7	34.9	35.3	35.8	36.5	37.1	37.6	37.9
72.5°	25.8	26.7	26.9	27.5	28.2	28.7	29.0	29.4
75°	18.1	19.4	19.6	20.0	20.6	21.2	21.7	21.5
77.5°	11.9	12.9	13.1	13.6	14.2	14.7	14.9	15.0
80°	7.1	7.6	7.8	8.1	8.5	8.7	9.0	9.3
82.5°	3.3	3.6	3.9	3.9	4.2	4.4	4.4	4.6
85°	1.1	1.1	1.2	1.2	1.4	1.4	1.5	1.4
87.5°	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - 90°-270°













(END OF REPORT)