

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: io LED

Report Number: P252250

Luminaire Tested: **LD6B15D010 EU6B10209024 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252250
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-7)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B15D010 EU6B10209024 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 979.0 lumens
Efficiency: N/A
Efficacy: 68.0 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.18 / 1.16
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

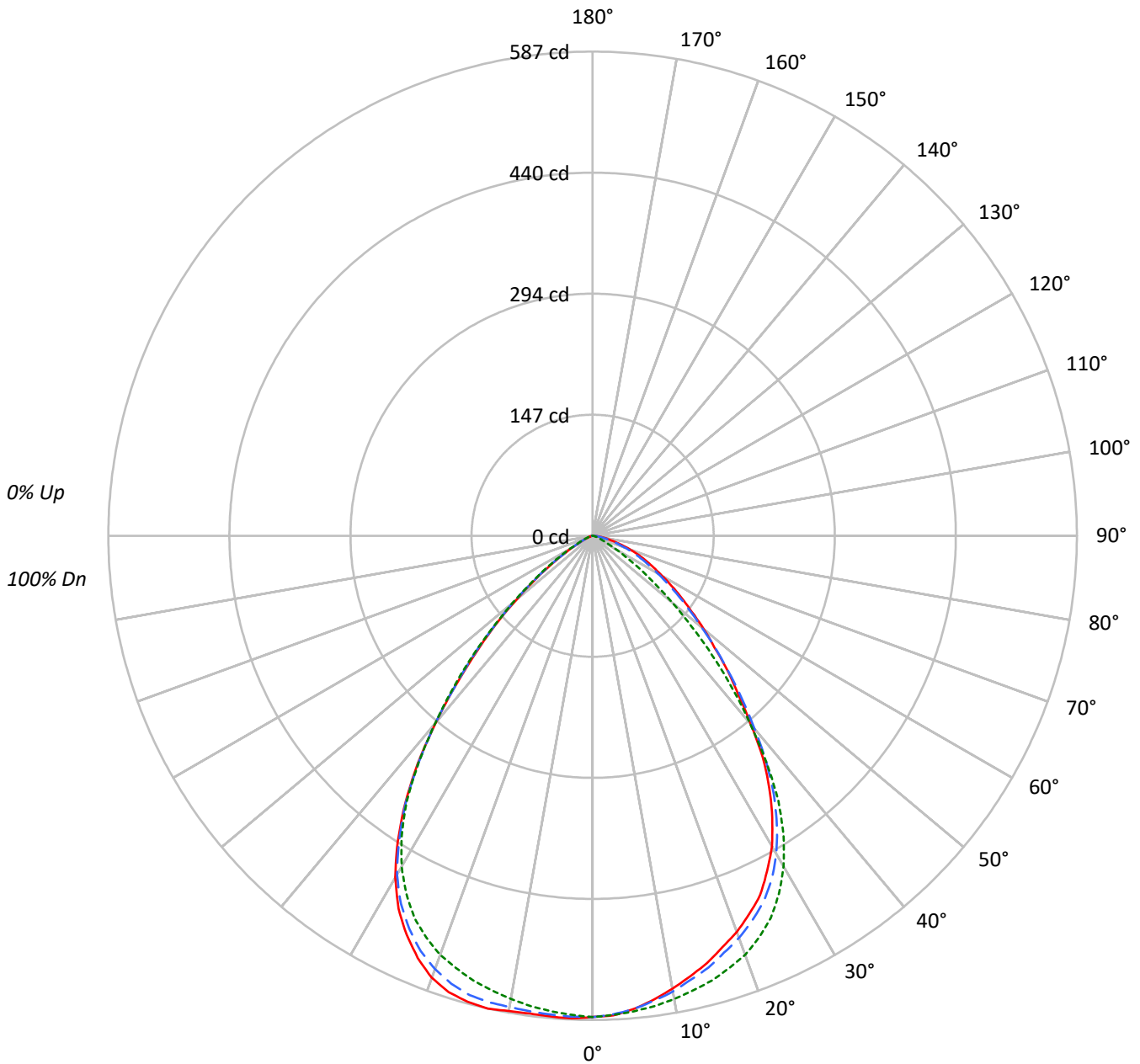
Input Watts (W): 14.39
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252250

CATALOG NUMBER: LD6B15D010 EU6B10209024 6LBSW1H

Luminous Intensity Polar Plot





TEST NUMBER: P252250

CATALOG NUMBER: LD6B15D010 EU6B10209024 6LBSW1H

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	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90																			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	85	82	80																			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72																			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64																			
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58																			
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52																			
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47																			
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43																			
9	65	54	47	42	64	53	46	42	52	46	42	51	46	41	50	45	41	40																			
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	37																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	38068	38068	38068
5°	37709	37892	38312
10°	36933	37774	38755
15°	36223	37702	39512
20°	35478	37533	39588
25°	34596	36784	38404
30°	32755	34879	36047
35°	29747	31268	31547
40°	25388	25269	25149
45°	21331	18923	18333
50°	17813	12809	12159
55°	14991	7860	7132
60°	12696	4136	3588
65°	10991	2177	1744
70°	9137	1335	935
75°	6755	882	529
80°	5297	526	263
85°	4192	524	0



TEST NUMBER: P252250

CATALOG NUMBER: LD6B15D010 EU6B10209024 6LBSW1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.0	5.6
10°-20°	157.5	16.1
20°-30°	232.5	23.8
30°-40°	239.6	24.5
40°-50°	165.5	16.9
50°-60°	81.6	8.3
60°-70°	33.1	3.4
70°-80°	11.8	1.2
80°-90°	2.4	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°	445.0	45.5
0°-40°	684.6	69.9
0°-60°	931.7	95.2
0°-90°	979.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	979.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	584	584	584	584	584	
5°	576	576	579	583	585	54
15°	536	542	558	576	585	151
25°	481	490	511	526	534	220
35°	374	383	393	395	396	231
45°	231	233	205	202	199	179
55°	132	127	69	65	63	119
65°	71	64	14	11	11	71
75°	27	23	4	2	2	30
85°	6	4	1	0	0	7
90°	0	0	0	0	0	



TEST NUMBER: P252250

CATALOG NUMBER: LD6B15D010 EU6B10209024 6LBSW1H

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	583.5	583.5	583.5	583.5	583.5	583.5	583.5	583.5	583.5	583.5	583.5
2.5°	582.1	580.0	581.4	578.6	582.1	578.6	579.3	580.0	579.3	580.0	580.7
5°	575.8	573.7	575.8	572.3	575.8	573.7	573.7	574.4	574.4	575.1	575.8
7.5°	567.3	565.2	567.3	563.8	568.0	565.9	565.9	567.3	566.6	567.3	568.7
10°	557.5	554.6	556.8	554.6	558.9	556.1	557.5	557.5	557.5	559.6	561.0
12.5°	546.9	544.1	546.9	543.4	547.6	545.5	546.2	548.3	549.0	550.4	551.1
15°	536.3	532.8	534.2	532.1	536.3	534.2	534.9	537.7	537.7	539.8	542.0
17.5°	522.9	520.1	522.9	520.1	523.6	522.2	523.6	525.8	525.8	527.9	530.0
20°	511.0	508.1	510.2	508.1	512.4	510.2	511.0	513.8	514.5	516.6	518.7
22.5°	496.2	494.0	495.4	493.3	497.6	496.2	496.9	499.7	500.4	501.8	505.3
25°	480.6	476.4	478.5	477.1	481.4	479.2	480.6	483.5	484.9	487.0	489.8
27.5°	458.1	456.0	457.4	457.4	460.9	458.8	459.5	462.3	464.4	466.6	470.1
30°	434.8	431.3	432.7	433.4	436.2	434.8	436.2	439.1	439.8	442.6	445.4
32.5°	405.2	403.8	406.6	405.2	406.6	406.6	407.4	409.5	410.9	412.3	415.8
35°	373.5	370.7	373.5	372.1	375.6	373.5	375.6	377.8	377.8	380.6	382.7
37.5°	339.0	335.5	336.9	336.9	338.3	337.6	337.6	341.1	341.8	343.9	346.0
40°	298.1	296.7	299.5	298.8	299.5	299.5	300.2	302.3	303.8	304.5	305.2
42.5°	261.5	262.2	262.9	262.9	262.9	262.9	262.9	265.7	265.0	267.1	267.8
45°	231.2	228.3	229.8	229.0	231.2	229.0	231.2	233.3	231.9	234.0	232.6
47.5°	200.2	200.2	200.2	199.4	200.9	200.2	201.6	202.3	202.3	202.3	201.6
50°	175.5	173.4	174.1	174.1	174.8	174.1	175.5	176.2	176.2	174.8	172.0
52.5°	151.5	150.8	150.8	152.2	152.2	151.5	151.5	151.5	151.5	149.4	148.0
55°	131.8	130.4	131.1	131.1	131.1	131.1	131.8	131.1	131.1	129.0	126.9
57.5°	114.2	112.8	112.8	112.8	113.5	112.8	112.8	112.8	112.1	109.9	107.1
60°	97.3	96.6	97.3	97.3	98.0	97.3	97.3	97.3	95.8	93.7	90.9
62.5°	83.2	83.2	83.2	83.9	83.9	83.2	83.2	82.5	81.8	78.9	76.1
65°	71.2	70.5	71.2	71.2	71.9	71.9	71.2	70.5	69.8	67.0	64.1
67.5°	59.2	58.5	59.2	59.2	59.9	59.2	59.2	59.2	57.1	55.7	52.9
70°	47.9	47.2	47.2	47.2	47.9	46.5	47.2	47.2	45.8	43.7	40.9
72.5°	36.6	36.6	36.6	36.6	36.6	36.6	35.9	35.9	34.5	32.4	31.0
75°	26.8	26.8	27.5	27.5	26.8	26.8	26.8	26.1	25.4	24.0	22.6
77.5°	19.7	19.7	19.7	19.7	19.0	19.0	19.0	18.3	17.6	16.9	15.5
80°	14.1	14.1	14.1	13.4	14.1	13.4	13.4	13.4	12.0	11.3	10.6
82.5°	9.9	9.2	9.2	9.2	9.2	9.2	9.2	8.5	8.5	7.8	7.0
85°	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	4.9	4.2	4.2
87.5°	2.8	3.5	3.5	3.5	3.5	3.5	3.5	2.8	2.8	2.8	2.1
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: P252250

CATALOG NUMBER: LD6B15D010 EU6B10209024 6LBSW1H

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	583.5	583.5	583.5	583.5	583.5	583.5	583.5	583.5	583.5	583.5	583.5
2.5°	580.7	580.7	582.1	580.0	583.5	581.4	580.7	584.2	582.1	581.4	582.8
5°	575.8	576.5	577.2	575.8	579.3	577.2	577.2	580.7	579.3	578.6	580.7
7.5°	569.4	570.2	571.6	570.9	573.7	572.3	573.0	576.5	575.1	575.1	577.2
10°	561.7	563.1	564.5	564.5	568.0	566.6	566.6	570.9	569.4	570.2	573.0
12.5°	552.5	554.6	556.8	557.5	561.0	558.9	559.6	564.5	563.8	564.5	567.3
15°	542.7	545.5	547.6	547.6	551.8	549.7	551.8	556.8	555.4	558.2	561.7
17.5°	531.4	534.2	537.0	537.7	542.0	540.6	543.4	548.3	548.3	549.7	553.9
20°	520.8	524.3	525.8	527.9	532.1	531.4	532.8	538.4	538.4	540.6	544.8
22.5°	506.7	510.2	513.1	515.2	518.7	518.7	520.8	525.8	525.8	527.2	531.4
25°	491.2	495.4	497.6	499.7	503.2	502.5	504.6	508.8	509.5	511.0	515.2
27.5°	471.5	475.0	477.8	479.2	484.2	481.4	483.5	488.4	487.7	489.1	492.6
30°	446.8	450.3	453.2	453.2	457.4	457.4	459.5	461.6	461.6	463.0	465.8
32.5°	417.9	422.2	422.2	424.3	427.1	424.3	427.1	429.9	428.5	430.6	432.7
35°	384.8	386.9	387.6	387.6	389.7	389.0	388.3	390.4	389.0	392.6	394.7
37.5°	344.6	347.4	346.0	347.4	346.7	344.6	344.6	348.2	345.3	346.0	348.2
40°	305.9	305.9	305.2	301.6	302.3	300.2	299.5	300.2	297.4	296.7	299.5
42.5°	265.7	265.0	262.9	257.9	258.6	255.1	252.3	252.3	250.9	250.2	250.9
45°	229.8	227.6	224.1	218.5	217.1	214.2	208.6	207.2	205.1	205.1	205.8
47.5°	196.6	193.8	188.2	181.8	178.3	174.8	169.1	167.0	163.5	162.1	163.5
50°	169.1	164.2	157.2	148.0	144.5	140.2	134.6	131.1	127.6	126.2	125.4
52.5°	143.8	136.7	129.7	118.4	115.6	111.4	103.6	100.1	96.6	93.7	93.7
55°	121.9	115.6	105.7	95.1	90.9	86.7	78.9	74.0	70.5	69.1	67.7
57.5°	102.2	95.1	86.0	74.7	70.5	66.2	58.5	53.6	50.0	47.9	46.5
60°	86.0	78.2	69.1	59.2	54.3	50.0	42.3	37.4	33.8	31.7	30.3
62.5°	70.5	64.1	55.0	45.8	41.6	37.4	31.0	26.1	22.6	21.1	19.0
65°	59.2	52.9	44.4	36.6	33.1	28.9	23.3	19.0	16.2	14.1	12.7
67.5°	47.9	43.0	35.9	28.9	25.4	22.6	17.6	14.1	11.3	9.9	9.2
70°	38.1	33.1	27.5	21.8	19.7	16.9	13.4	9.9	8.5	7.0	6.3
72.5°	28.2	24.7	20.4	16.2	14.1	12.7	9.2	7.8	5.6	4.9	4.2
75°	20.4	17.6	14.8	11.3	9.9	9.2	7.0	4.9	4.2	3.5	2.8
77.5°	14.1	12.7	9.9	7.8	7.0	6.3	4.9	3.5	2.8	2.1	2.1
80°	9.2	7.8	6.3	4.9	4.9	4.2	2.8	2.1	2.1	1.4	1.4
82.5°	5.6	4.9	4.2	3.5	2.8	2.8	2.1	1.4	1.4	0.7	0.7
85°	3.5	2.8	2.1	2.1	1.4	1.4	1.4	0.7	0.7	0.7	0.7
87.5°	1.4	1.4	1.4	0.7	0.7	0.7	0.7	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: P252250

CATALOG NUMBER: LD6B15D010 EU6B10209024 6LBSW1H

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	583.5	583.5	583.5	583.5	583.5	583.5	583.5	583.5	583.5	583.5	583.5
2.5°	582.8	582.8	584.2	582.1	583.5	583.5	585.0	582.1	583.5	584.2	585.7
5°	580.0	580.7	582.1	581.4	582.1	582.1	583.5	580.0	582.8	582.8	585.0
7.5°	577.2	577.2	578.6	577.9	579.3	580.0	581.4	578.6	581.4	581.4	583.5
10°	573.7	573.7	575.8	575.1	577.2	577.9	580.0	577.2	580.0	580.7	582.8
12.5°	568.7	569.4	571.6	571.6	573.7	575.1	577.2	575.8	579.3	580.0	582.8
15°	563.1	564.5	567.3	566.6	568.7	570.9	573.7	571.6	576.5	577.9	580.7
17.5°	556.1	557.5	559.6	559.6	561.7	563.1	566.6	565.2	569.4	570.2	573.7
20°	545.5	547.6	550.4	549.7	551.8	553.2	556.1	554.6	558.9	560.3	563.8
22.5°	532.8	534.2	536.3	536.3	538.4	539.8	542.7	540.6	544.8	545.5	548.3
25°	515.9	517.3	518.7	519.4	521.5	522.2	523.6	522.2	525.8	526.5	530.0
27.5°	494.0	494.7	496.9	496.9	498.3	499.0	501.1	498.3	503.2	503.2	505.3
30°	468.0	467.3	470.1	468.7	470.1	470.1	472.2	470.8	474.3	472.9	475.0
32.5°	433.4	434.8	434.8	433.4	436.2	435.5	435.5	434.1	436.2	437.0	438.4
35°	393.3	395.4	395.4	396.1	396.8	394.7	395.4	391.1	394.7	395.4	396.1
37.5°	349.6	347.4	348.9	346.7	350.3	346.0	346.0	343.2	346.0	346.0	346.7
40°	299.5	298.8	300.2	298.8	298.1	297.4	296.0	293.9	296.7	295.3	297.4
42.5°	252.3	251.6	251.6	250.2	249.5	249.5	248.1	246.7	246.0	246.0	249.5
45°	203.7	205.1	203.7	203.0	204.4	203.0	203.7	200.9	202.3	200.9	202.3
47.5°	162.8	163.5	162.1	160.7	162.8	160.7	160.7	158.6	161.4	161.4	160.0
50°	126.2	125.4	124.0	125.4	124.7	124.7	124.7	122.6	124.0	121.9	123.3
52.5°	93.0	92.3	92.3	91.6	92.3	91.6	91.6	90.9	90.9	90.2	90.9
55°	67.7	67.0	65.5	65.5	65.5	66.2	65.5	64.8	64.8	64.1	64.8
57.5°	45.8	44.4	44.4	44.4	44.4	43.7	43.7	43.0	43.7	43.0	43.7
60°	29.6	29.6	28.2	28.2	28.2	28.2	28.2	27.5	28.2	28.2	28.2
62.5°	18.3	18.3	17.6	16.9	17.6	16.9	16.9	16.9	17.6	16.9	17.6
65°	12.0	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3
67.5°	8.5	7.8	7.8	7.8	7.8	7.8	7.8	7.0	7.8	7.8	7.8
70°	5.6	5.6	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
72.5°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
75°	2.8	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
77.5°	2.1	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
80°	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
82.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
85°	0.7	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	0.7	0.7	0.7	0.7	0.7	0.7	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: P252250

CATALOG NUMBER: LD6B15D010 EU6B10209024 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	583.5	583.5	583.5	583.5	583.5	583.5	583.5	583.5
2.5°	583.5	584.2	582.8	583.5	582.1	583.5	584.2	585.7
5°	582.1	582.8	581.4	582.8	581.4	582.8	583.5	585.0
7.5°	580.7	582.1	580.7	582.1	580.7	582.1	582.8	584.2
10°	580.7	582.8	581.4	583.5	581.4	582.8	584.2	585.0
12.5°	580.7	582.8	582.1	583.5	582.8	584.2	585.7	587.1
15°	579.3	581.4	580.0	582.1	581.4	582.1	585.0	585.0
17.5°	571.6	573.7	573.7	575.1	575.1	577.2	578.6	580.0
20°	561.7	563.8	563.1	565.2	565.2	567.3	568.7	570.2
22.5°	546.9	549.7	549.0	551.1	550.4	551.8	554.6	553.9
25°	527.9	531.4	530.7	532.1	531.4	531.4	532.8	533.5
27.5°	504.6	506.7	506.0	507.4	506.0	507.4	508.8	509.5
30°	474.3	475.7	475.0	475.7	475.0	476.4	477.1	478.5
32.5°	437.7	439.8	437.7	439.1	438.4	438.4	441.2	439.8
35°	394.0	394.7	395.4	395.4	394.0	394.7	396.1	396.1
37.5°	345.3	348.9	344.6	346.7	346.0	346.0	346.0	348.2
40°	294.6	295.3	293.9	293.9	293.9	293.2	296.0	295.3
42.5°	246.7	247.4	246.7	244.6	245.3	245.3	247.4	244.6
45°	200.2	201.6	200.9	200.9	199.4	199.4	200.2	198.7
47.5°	158.6	160.0	157.9	158.6	157.2	158.6	157.9	159.3
50°	120.5	121.9	121.2	121.9	121.9	120.5	122.6	119.8
52.5°	90.2	90.9	90.2	89.5	88.8	88.8	90.2	89.5
55°	64.1	63.4	63.4	63.4	64.1	64.1	63.4	62.7
57.5°	43.0	43.0	42.3	42.3	43.0	41.6	42.3	41.6
60°	27.5	27.5	27.5	27.5	26.8	27.5	27.5	27.5
62.5°	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9
65°	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3
67.5°	7.0	7.8	7.8	7.8	7.0	7.0	7.0	7.0
70°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
72.5°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
75°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
77.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
82.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.7	0.7	0.7	0.7	0.7	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 E9808895 / USPTCWHP6082093





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













(END OF REPORT)