

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: P252253

Luminaire Tested: **LD6B15D010 EU6B10209035 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252253
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 EU6B10209035 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1174.0 lumens
Efficiency: N/A
Efficacy: 81.6 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

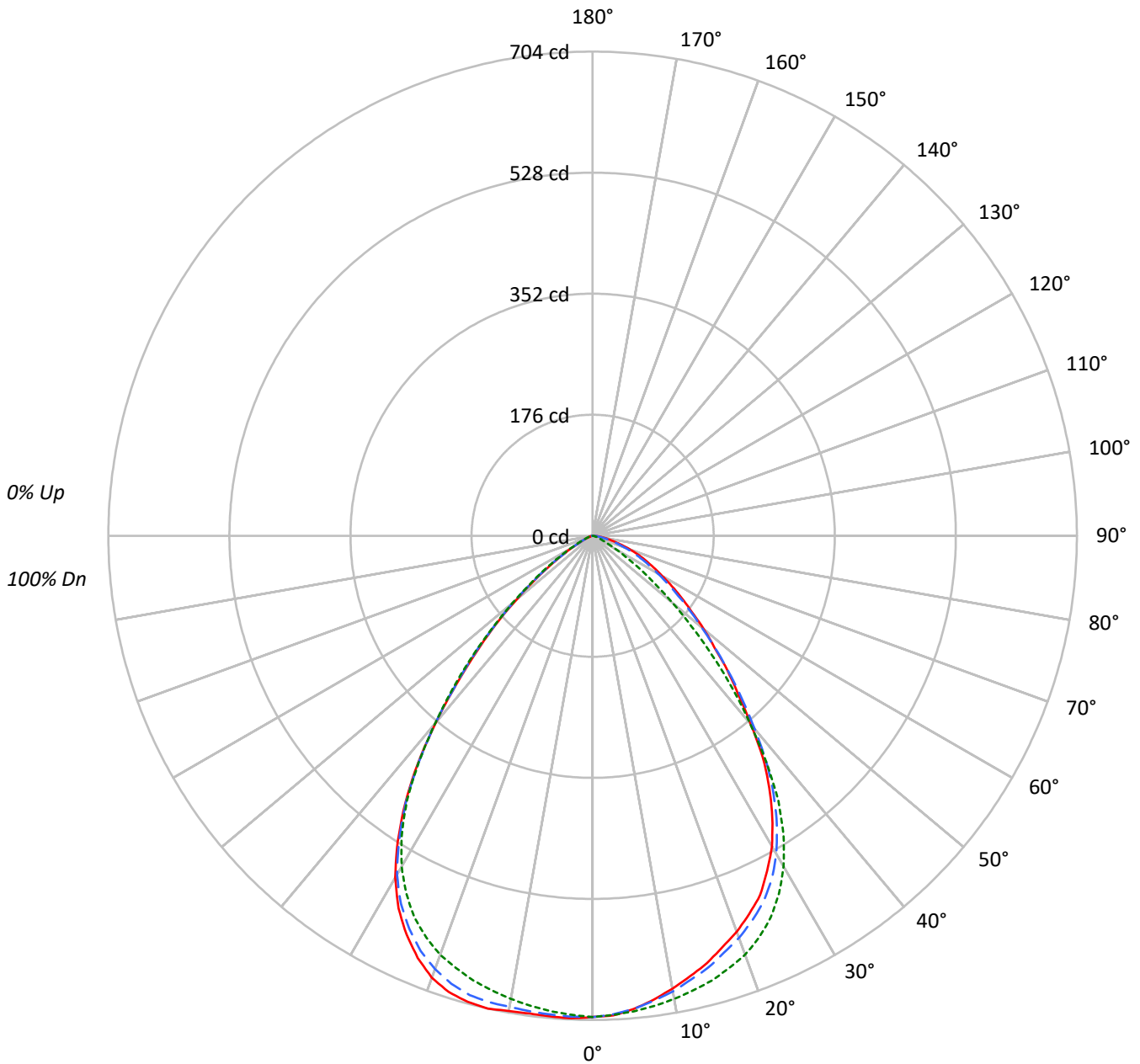
Input Watts (W): 14.39
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252253

CATALOG NUMBER: LD6B15D010 EU6B10209035 6LBSW1H

Luminous Intensity Polar Plot





TEST NUMBER: P252253

CATALOG NUMBER: LD6B15D010 EU6B10209035 6LBSW1H

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	45655	45655	45655
5°	45221	45443	45941
10°	44286	45293	46472
15°	43443	45213	47381
20°	42538	45003	47468
25°	41492	44105	46056
30°	39286	41833	43234
35°	35673	37488	37831
40°	30447	30302	30157
45°	25576	22688	21987
50°	21355	15356	14585
55°	17971	9418	8554
60°	15214	4958	4306
65°	13183	2609	2084
70°	10968	1621	1125
75°	8091	1059	630
80°	6349	639	301
85°	5090	599	0



TEST NUMBER: P252253

CATALOG NUMBER: LD6B15D010 EU6B10209035 6LBSW1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.0	5.6
10°-20°	188.8	16.1
20°-30°	278.8	23.8
30°-40°	287.4	24.5
40°-50°	198.5	16.9
50°-60°	97.8	8.3
60°-70°	39.6	3.4
70°-80°	14.1	1.2
80°-90°	2.9	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°	533.6	45.5
0°-40°	821.0	69.9
0°-60°	1117.3	95.2
0°-90°	1174.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1174.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	700	700	700	700	700	
5°	690	690	694	699	702	65
15°	643	650	669	691	702	181
25°	576	587	613	630	640	264
35°	448	459	471	473	475	278
45°	277	279	246	243	238	214
55°	158	152	83	78	75	143
65°	85	77	17	14	14	85
75°	32	27	4	2	2	36
85°	7	5	1	0	0	8
90°	0	0	0	0	0	



TEST NUMBER: P252253

CATALOG NUMBER: LD6B15D010 EU6B10209035 6LBSW1H

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	699.8	699.8	699.8	699.8	699.8	699.8	699.8	699.8	699.8	699.8	699.8
2.5°	698.1	695.6	697.2	693.9	698.1	693.9	694.7	695.6	694.7	695.6	696.4
5°	690.5	687.9	690.5	686.3	690.5	687.9	687.9	688.8	688.8	689.6	690.5
7.5°	680.3	677.8	680.3	676.1	681.2	678.6	678.6	680.3	679.5	680.3	682.0
10°	668.5	665.1	667.7	665.1	670.2	666.8	668.5	668.5	668.5	671.0	672.7
12.5°	655.8	652.4	655.8	651.6	656.7	654.1	655.0	657.5	658.4	660.1	660.9
15°	643.2	638.9	640.6	638.1	643.2	640.6	641.5	644.8	644.8	647.4	649.9
17.5°	627.1	623.7	627.1	623.7	627.9	626.2	627.9	630.5	630.5	633.0	635.5
20°	612.7	609.3	611.9	609.3	614.4	611.9	612.7	616.1	617.0	619.5	622.0
22.5°	595.0	592.4	594.1	591.6	596.7	595.0	595.8	599.2	600.0	601.7	606.0
25°	576.4	571.3	573.9	572.2	577.2	574.7	576.4	579.8	581.5	584.0	587.4
27.5°	549.3	546.8	548.5	548.5	552.7	550.2	551.0	554.4	556.9	559.5	563.7
30°	521.5	517.2	518.9	519.8	523.1	521.5	523.1	526.5	527.4	530.7	534.1
32.5°	486.0	484.3	487.6	486.0	487.6	487.6	488.5	491.0	492.7	494.4	498.6
35°	447.9	444.5	447.9	446.2	450.5	447.9	450.5	453.0	453.0	456.4	458.9
37.5°	406.5	402.3	404.0	404.0	405.7	404.8	404.8	409.0	409.9	412.4	415.0
40°	357.5	355.8	359.2	358.3	359.2	359.2	360.0	362.6	364.3	365.1	365.9
42.5°	313.5	314.4	315.2	315.2	315.2	315.2	315.2	318.6	317.8	320.3	321.2
45°	277.2	273.8	275.5	274.7	277.2	274.7	277.2	279.7	278.1	280.6	278.9
47.5°	240.0	240.0	240.0	239.2	240.9	240.0	241.7	242.6	242.6	242.6	241.7
50°	210.4	207.9	208.7	208.7	209.6	208.7	210.4	211.3	211.3	209.6	206.2
52.5°	181.7	180.9	180.9	182.6	182.6	181.7	181.7	181.7	181.7	179.2	177.5
55°	158.0	156.4	157.2	157.2	157.2	157.2	158.0	157.2	157.2	154.7	152.1
57.5°	136.9	135.2	135.2	135.2	136.1	135.2	135.2	135.2	134.4	131.8	128.5
60°	116.6	115.8	116.6	116.6	117.5	116.6	116.6	116.6	114.9	112.4	109.0
62.5°	99.7	99.7	99.7	100.6	100.6	99.7	99.7	98.9	98.0	94.7	91.3
65°	85.4	84.5	85.4	85.4	86.2	86.2	85.4	84.5	83.7	80.3	76.9
67.5°	71.0	70.1	71.0	71.0	71.8	71.0	71.0	71.0	68.5	66.8	63.4
70°	57.5	56.6	56.6	56.6	57.5	55.8	56.6	56.6	54.9	52.4	49.0
72.5°	43.9	43.9	43.9	43.9	43.9	43.9	43.1	43.1	41.4	38.9	37.2
75°	32.1	32.1	33.0	33.0	32.1	32.1	32.1	31.3	30.4	28.7	27.0
77.5°	23.7	23.7	23.7	23.7	22.8	22.8	22.8	22.0	21.1	20.3	18.6
80°	16.9	16.9	16.9	16.1	16.9	16.1	16.1	16.1	14.4	13.5	12.7
82.5°	11.8	11.0	11.0	11.0	11.0	11.0	11.0	10.1	10.1	9.3	8.5
85°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	5.9	5.1	5.1
87.5°	3.4	4.2	4.2	4.2	4.2	4.2	4.2	3.4	3.4	3.4	2.5
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: P252253

CATALOG NUMBER: LD6B15D010 EU6B10209035 6LBSW1H

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	699.8	699.8	699.8	699.8	699.8	699.8	699.8	699.8	699.8	699.8	699.8
2.5°	696.4	696.4	698.1	695.6	699.8	697.2	696.4	700.6	698.1	697.2	698.9
5°	690.5	691.3	692.2	690.5	694.7	692.2	692.2	696.4	694.7	693.9	696.4
7.5°	682.9	683.7	685.4	684.6	687.9	686.3	687.1	691.3	689.6	689.6	692.2
10°	673.6	675.3	677.0	677.0	681.2	679.5	679.5	684.6	682.9	683.7	687.1
12.5°	662.6	665.1	667.7	668.5	672.7	670.2	671.0	677.0	676.1	677.0	680.3
15°	650.8	654.1	656.7	656.7	661.7	659.2	661.7	667.7	666.0	669.4	673.6
17.5°	637.2	640.6	644.0	644.8	649.9	648.2	651.6	657.5	657.5	659.2	664.3
20°	624.6	628.8	630.5	633.0	638.1	637.2	638.9	645.7	645.7	648.2	653.3
22.5°	607.7	611.9	615.3	617.8	622.0	622.0	624.6	630.5	630.5	632.2	637.2
25°	589.1	594.1	596.7	599.2	603.4	602.6	605.1	610.2	611.0	612.7	617.8
27.5°	565.4	569.6	573.0	574.7	580.6	577.2	579.8	585.7	584.8	586.5	590.8
30°	535.8	540.0	543.4	543.4	548.5	548.5	551.0	553.6	553.6	555.3	558.6
32.5°	501.2	506.2	506.2	508.8	512.2	508.8	512.2	515.5	513.8	516.4	518.9
35°	461.4	464.0	464.8	464.8	467.4	466.5	465.7	468.2	466.5	470.7	473.3
37.5°	413.3	416.7	415.0	416.7	415.8	413.3	413.3	417.5	414.1	415.0	417.5
40°	366.8	366.8	365.9	361.7	362.6	360.0	359.2	360.0	356.6	355.8	359.2
42.5°	318.6	317.8	315.2	309.3	310.2	305.9	302.6	302.6	300.9	300.0	300.9
45°	275.5	273.0	268.8	262.0	260.3	256.9	250.2	248.5	245.9	245.9	246.8
47.5°	235.8	232.4	225.7	218.0	213.8	209.6	202.8	200.3	196.1	194.4	196.1
50°	202.8	196.9	188.5	177.5	173.3	168.2	161.4	157.2	153.0	151.3	150.4
52.5°	172.4	164.0	155.5	142.0	138.6	133.5	124.2	120.0	115.8	112.4	112.4
55°	146.2	138.6	126.8	114.1	109.0	104.0	94.7	88.7	84.5	82.8	81.1
57.5°	122.5	114.1	103.1	89.6	84.5	79.4	70.1	64.2	60.0	57.5	55.8
60°	103.1	93.8	82.8	71.0	65.1	60.0	50.7	44.8	40.6	38.0	36.3
62.5°	84.5	76.9	65.9	54.9	49.9	44.8	37.2	31.3	27.0	25.4	22.8
65°	71.0	63.4	53.2	43.9	39.7	34.7	27.9	22.8	19.4	16.9	15.2
67.5°	57.5	51.6	43.1	34.7	30.4	27.0	21.1	16.9	13.5	11.8	11.0
70°	45.6	39.7	33.0	26.2	23.7	20.3	16.1	11.8	10.1	8.5	7.6
72.5°	33.8	29.6	24.5	19.4	16.9	15.2	11.0	9.3	6.8	5.9	5.1
75°	24.5	21.1	17.7	13.5	11.8	11.0	8.5	5.9	5.1	4.2	3.4
77.5°	16.9	15.2	11.8	9.3	8.5	7.6	5.9	4.2	3.4	2.5	2.5
80°	11.0	9.3	7.6	5.9	5.9	5.1	3.4	2.5	2.5	1.7	1.7
82.5°	6.8	5.9	5.1	4.2	3.4	3.4	2.5	1.7	1.7	0.8	0.8
85°	4.2	3.4	2.5	2.5	1.7	1.7	1.7	0.8	0.8	0.8	0.8
87.5°	1.7	1.7	1.7	0.8	0.8	0.8	0.8	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: P252253

CATALOG NUMBER: LD6B15D010 EU6B10209035 6LBSW1H

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	699.8	699.8	699.8	699.8	699.8	699.8	699.8	699.8	699.8	699.8	699.8
2.5°	698.9	698.9	700.6	698.1	699.8	699.8	701.5	698.1	699.8	700.6	702.3
5°	695.6	696.4	698.1	697.2	698.1	698.1	699.8	695.6	698.9	698.9	701.5
7.5°	692.2	692.2	693.9	693.0	694.7	695.6	697.2	693.9	697.2	697.2	699.8
10°	687.9	687.9	690.5	689.6	692.2	693.0	695.6	692.2	695.6	696.4	698.9
12.5°	682.0	682.9	685.4	685.4	687.9	689.6	692.2	690.5	694.7	695.6	698.9
15°	675.3	677.0	680.3	679.5	682.0	684.6	687.9	685.4	691.3	693.0	696.4
17.5°	666.8	668.5	671.0	671.0	673.6	675.3	679.5	677.8	682.9	683.7	687.9
20°	654.1	656.7	660.1	659.2	661.7	663.4	666.8	665.1	670.2	671.9	676.1
22.5°	638.9	640.6	643.2	643.2	645.7	647.4	650.8	648.2	653.3	654.1	657.5
25°	618.6	620.3	622.0	622.9	625.4	626.2	627.9	626.2	630.5	631.3	635.5
27.5°	592.4	593.3	595.8	595.8	597.5	598.4	600.9	597.5	603.4	603.4	606.0
30°	561.2	560.3	563.7	562.0	563.7	563.7	566.2	564.6	568.8	567.1	569.6
32.5°	519.8	521.5	521.5	519.8	523.1	522.3	522.3	520.6	523.1	524.0	525.7
35°	471.6	474.1	474.1	475.0	475.8	473.3	474.1	469.1	473.3	474.1	475.0
37.5°	419.2	416.7	418.3	415.8	420.0	415.0	415.0	411.6	415.0	415.0	415.8
40°	359.2	358.3	360.0	358.3	357.5	356.6	355.0	352.4	355.8	354.1	356.6
42.5°	302.6	301.7	301.7	300.0	299.2	299.2	297.5	295.8	295.0	295.0	299.2
45°	244.2	245.9	244.2	243.4	245.1	243.4	244.2	240.9	242.6	240.9	242.6
47.5°	195.2	196.1	194.4	192.7	195.2	192.7	192.7	190.2	193.5	193.5	191.8
50°	151.3	150.4	148.7	150.4	149.6	149.6	149.6	147.1	148.7	146.2	147.9
52.5°	111.6	110.7	110.7	109.9	110.7	109.9	109.9	109.0	109.0	108.2	109.0
55°	81.1	80.3	78.6	78.6	78.6	79.4	78.6	77.8	77.8	76.9	77.8
57.5°	54.9	53.2	53.2	53.2	53.2	52.4	52.4	51.6	52.4	51.6	52.4
60°	35.5	35.5	33.8	33.8	33.8	33.8	33.8	33.0	33.8	33.8	33.8
62.5°	22.0	22.0	21.1	20.3	21.1	20.3	20.3	20.3	21.1	20.3	21.1
65°	14.4	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
67.5°	10.1	9.3	9.3	9.3	9.3	9.3	9.3	8.5	9.3	9.3	9.3
70°	6.8	6.8	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
72.5°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
75°	3.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
77.5°	2.5	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
80°	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
82.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
85°	0.8	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	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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: P252253

CATALOG NUMBER: LD6B15D010 EU6B10209035 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	699.8	699.8	699.8	699.8	699.8	699.8	699.8	699.8
2.5°	699.8	700.6	698.9	699.8	698.1	699.8	700.6	702.3
5°	698.1	698.9	697.2	698.9	697.2	698.9	699.8	701.5
7.5°	696.4	698.1	696.4	698.1	696.4	698.1	698.9	700.6
10°	696.4	698.9	697.2	699.8	697.2	698.9	700.6	701.5
12.5°	696.4	698.9	698.1	699.8	698.9	700.6	702.3	704.0
15°	694.7	697.2	695.6	698.1	697.2	698.1	701.5	701.5
17.5°	685.4	687.9	687.9	689.6	689.6	692.2	693.9	695.6
20°	673.6	676.1	675.3	677.8	677.8	680.3	682.0	683.7
22.5°	655.8	659.2	658.4	660.9	660.1	661.7	665.1	664.3
25°	633.0	637.2	636.4	638.1	637.2	637.2	638.9	639.8
27.5°	605.1	607.7	606.8	608.5	606.8	608.5	610.2	611.0
30°	568.8	570.5	569.6	570.5	569.6	571.3	572.2	573.9
32.5°	524.8	527.4	524.8	526.5	525.7	525.7	529.1	527.4
35°	472.4	473.3	474.1	474.1	472.4	473.3	475.0	475.0
37.5°	414.1	418.3	413.3	415.8	415.0	415.0	415.0	417.5
40°	353.3	354.1	352.4	352.4	352.4	351.6	355.0	354.1
42.5°	295.8	296.6	295.8	293.3	294.1	294.1	296.6	293.3
45°	240.0	241.7	240.9	240.9	239.2	239.2	240.0	238.3
47.5°	190.2	191.8	189.3	190.2	188.5	190.2	189.3	191.0
50°	144.5	146.2	145.4	146.2	146.2	144.5	147.1	143.7
52.5°	108.2	109.0	108.2	107.3	106.5	106.5	108.2	107.3
55°	76.9	76.1	76.1	76.1	76.9	76.9	76.1	75.2
57.5°	51.6	51.6	50.7	50.7	51.6	49.9	50.7	49.9
60°	33.0	33.0	33.0	33.0	32.1	33.0	33.0	33.0
62.5°	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3
65°	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
67.5°	8.5	9.3	9.3	9.3	8.5	8.5	8.5	8.5
70°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
72.5°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
75°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
77.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
80°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
82.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.8	0.8	0.8	0.8	0.8	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)