

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: PORTFOLIO

Report Number: P252654

Luminaire Tested: **LE_6B10D010 EC6B10209027 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252654
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-9)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B10D010 EC6B10209027 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1018.8 lumens
Efficiency: N/A
Efficacy: 101.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

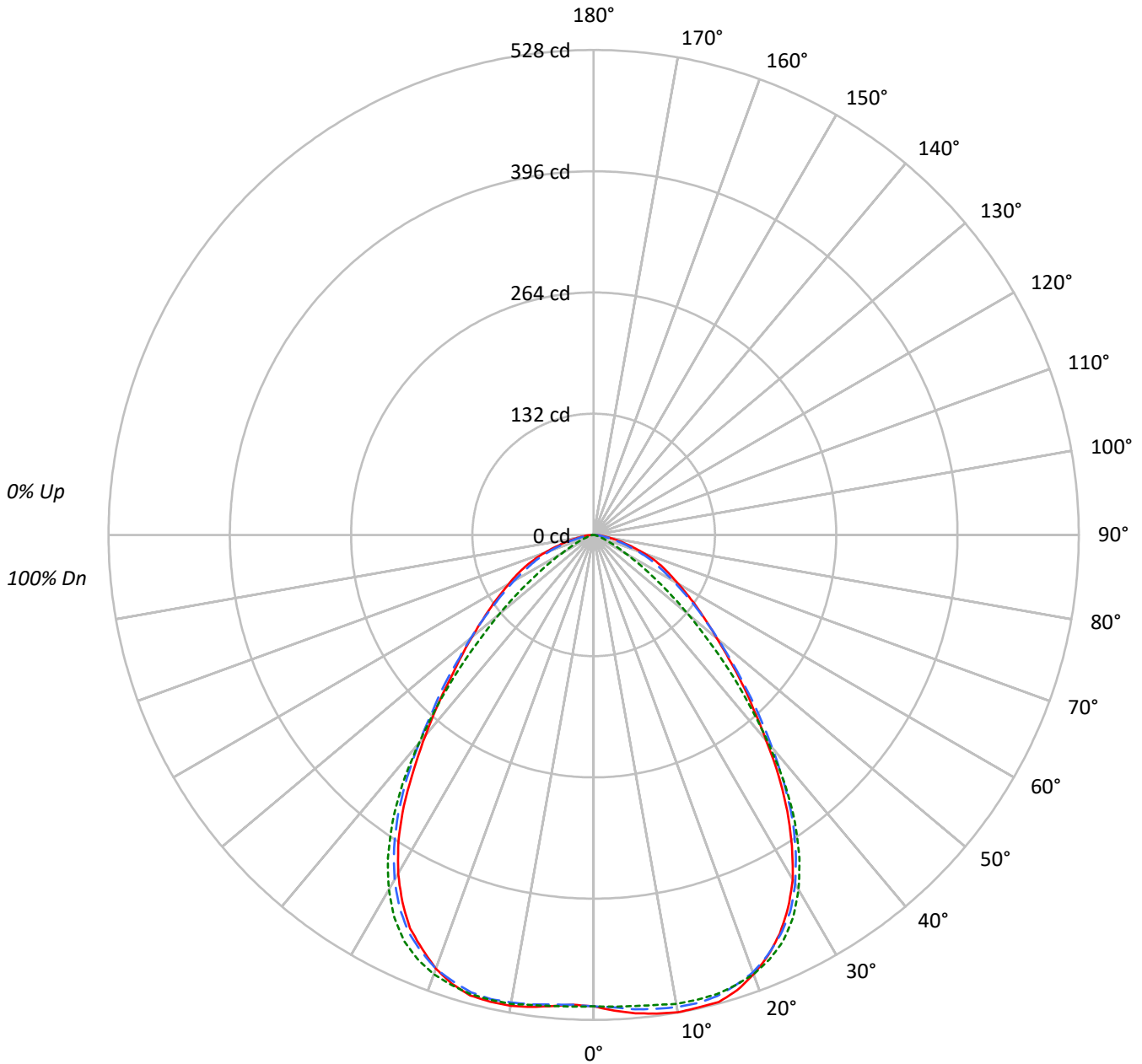
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252654

CATALOG NUMBER: LE_6B10D010 EC6B10209027 6LBDW1H

Luminous Intensity Polar Plot





TEST NUMBER: P252654

CATALOG NUMBER: LE_6B10D010 EC6B10209027 6LBDW1H

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	109	105	102	99	101	98	96	97	95	93	94	92	91	89																			
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78																			
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68																			
4	89	78	71	65	87	77	70	65	75	69	64	73	67	63	71	66	62	61																			
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54																			
6	77	65	57	52	75	64	57	51	63	56	51	61	55	51	59	54	50	48																			
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	45	44																			
8	67	55	47	42	66	54	47	42	53	47	42	52	46	42	51	45	41	40																			
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36																			
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	33481	33481	33481
5°	34238	33714	33714
10°	34965	34342	34482
15°	35554	34960	35061
20°	35332	35332	34880
25°	34488	35122	34020
30°	32649	33584	32047
35°	29261	30416	28680
40°	24860	25166	24238
45°	21036	19228	20298
50°	17762	13560	17539
55°	15606	8758	15446
60°	13831	5206	13935
65°	12782	3149	12782
70°	11083	1812	10796
75°	8797	1109	8217
80°	6537	789	6312
85°	5988	599	5390



TEST NUMBER: P252654

CATALOG NUMBER: LE_6B10D010 EC6B10209027 6LBDW1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.4	4.9
10°-20°	146.3	14.4
20°-30°	220.0	21.6
30°-40°	231.3	22.7
40°-50°	172.8	17.0
50°-60°	107.5	10.6
60°-70°	61.2	6.0
70°-80°	25.2	2.5
80°-90°	5.2	0.5
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°	415.6	40.8
0°-40°	646.9	63.5
0°-60°	927.2	91.0
0°-90°	1018.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1018.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	513	513	513	513	513	
5°	523	518	515	513	515	50
15°	526	520	518	516	519	148
25°	479	481	488	477	473	219
35°	367	377	382	371	360	228
45°	228	233	208	229	220	177
55°	137	134	77	132	136	123
65°	83	74	20	74	83	81
75°	35	28	4	27	33	38
85°	8	5	1	4	7	9
90°	0	0	0	0	0	



TEST NUMBER: P252654

CATALOG NUMBER: LE_6B10D010 EC6B10209027 6LBDW1H

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	513.2	513.2	513.2	513.2	513.2	513.2	513.2	513.2	513.2	513.2	513.2
2.5°	518.4	517.6	518.4	516.9	516.1	516.1	516.9	515.5	514.8	515.5	514.8
5°	522.8	521.2	522.0	521.2	519.8	519.8	520.5	518.4	518.4	519.1	518.4
7.5°	525.6	525.6	525.6	524.1	523.4	522.8	524.1	522.0	521.2	521.2	520.5
10°	527.8	527.0	527.8	526.4	524.9	524.1	525.6	524.1	522.8	524.1	522.0
12.5°	527.0	527.0	527.0	526.4	524.9	524.1	525.6	523.4	522.8	523.4	522.0
15°	526.4	524.1	524.9	524.1	522.0	522.0	522.8	520.5	519.1	521.2	519.8
17.5°	519.8	518.4	519.1	517.6	516.1	515.5	516.1	515.5	514.0	515.5	514.0
20°	508.9	508.9	509.6	508.1	506.8	506.0	507.5	506.0	504.5	506.8	506.8
22.5°	495.9	495.9	495.9	495.1	494.4	494.4	494.4	493.6	493.0	494.4	495.1
25°	479.1	478.4	479.1	479.9	479.1	478.4	479.1	479.1	477.8	480.6	480.6
27.5°	458.1	458.1	459.5	458.9	458.9	458.1	459.5	459.5	458.9	461.0	463.1
30°	433.4	432.0	433.4	433.4	434.1	434.1	434.9	434.9	434.9	437.0	438.5
32.5°	401.5	402.2	404.4	403.6	402.9	405.1	405.1	406.5	407.2	408.8	409.5
35°	367.4	368.1	368.1	368.8	370.2	368.8	372.4	371.8	372.4	375.4	376.8
37.5°	331.0	328.9	332.5	331.0	331.8	331.8	333.2	334.0	336.1	339.8	339.8
40°	291.9	292.6	294.0	294.8	295.5	295.5	295.5	297.6	298.4	302.8	302.0
42.5°	257.8	257.8	259.1	259.9	259.9	259.9	259.9	262.1	263.5	265.0	266.4
45°	228.0	225.8	227.2	227.2	228.6	228.0	229.4	230.9	231.6	233.8	233.0
47.5°	199.6	198.9	199.6	200.4	199.6	200.4	201.1	201.9	202.5	202.5	202.5
50°	175.0	175.0	175.6	176.4	176.4	176.4	176.4	177.1	177.1	178.6	177.1
52.5°	154.6	155.4	155.4	154.6	155.4	155.4	156.1	156.1	155.4	155.4	153.1
55°	137.2	136.5	137.2	136.5	137.2	137.2	136.5	136.5	135.8	135.0	134.2
57.5°	120.5	120.5	120.5	120.5	119.8	120.5	119.8	119.0	119.0	117.6	115.4
60°	106.0	106.0	106.0	106.0	106.0	105.2	106.0	105.2	103.9	102.4	99.5
62.5°	93.6	92.9	93.6	92.9	92.9	92.2	92.2	91.5	90.0	88.6	85.6
65°	82.8	83.5	82.8	82.8	82.0	81.2	81.2	80.6	78.4	77.0	74.0
67.5°	71.1	70.4	70.4	70.4	69.8	69.8	69.8	68.2	66.8	64.6	61.8
70°	58.1	58.1	58.1	57.4	57.4	56.6	56.6	55.9	54.5	53.0	49.4
72.5°	45.8	45.8	45.8	44.2	45.0	44.2	44.2	42.9	42.1	39.9	37.8
75°	34.9	34.9	34.1	34.1	33.4	32.6	32.6	32.0	31.2	29.8	27.6
77.5°	25.4	25.4	25.4	24.6	24.0	23.2	23.2	22.5	21.8	21.0	19.6
80°	17.4	17.4	17.4	17.4	16.8	16.0	16.0	15.2	15.2	14.5	13.1
82.5°	11.6	11.6	11.6	11.6	10.9	10.9	10.9	10.1	9.5	9.5	8.0
85°	8.0	8.0	7.2	7.2	7.2	7.2	6.5	6.5	5.8	5.1	5.1
87.5°	4.4	4.4	4.4	4.4	3.6	3.6	3.6	3.6	2.9	2.9	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: P252654

CATALOG NUMBER: LE_6B10D010 EC6B10209027 6LBDW1H

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	513.2	513.2	513.2	513.2	513.2	513.2	513.2	513.2	513.2	513.2	513.2
2.5°	516.9	516.9	516.1	514.0	514.8	514.0	514.8	514.0	511.9	514.0	511.9
5°	519.8	520.5	519.1	516.1	516.9	516.1	516.1	515.5	513.2	514.8	513.2
7.5°	522.8	522.0	521.2	518.4	519.1	518.4	518.4	516.9	514.8	516.1	514.0
10°	524.1	524.1	522.8	519.8	519.8	519.1	519.8	519.1	516.1	518.4	516.9
12.5°	524.1	523.4	523.4	519.8	520.5	519.8	520.5	519.1	516.9	518.4	517.6
15°	522.0	522.0	521.2	517.6	518.4	518.4	519.1	517.6	515.5	517.6	516.1
17.5°	517.6	517.6	516.9	514.0	515.5	515.5	516.1	514.8	512.5	514.0	514.0
20°	508.9	509.6	509.6	507.5	508.9	508.9	509.6	508.9	508.1	508.9	507.5
22.5°	498.8	500.2	500.2	498.0	499.5	499.5	501.6	500.9	499.5	500.2	499.5
25°	483.5	485.0	486.4	485.0	486.4	486.4	488.6	487.9	486.4	487.9	485.6
27.5°	466.1	466.8	468.2	466.8	469.0	468.2	470.4	469.8	467.5	469.8	469.0
30°	441.4	444.2	446.5	444.2	446.5	446.5	447.9	447.2	446.5	445.8	445.8
32.5°	413.8	416.8	416.8	416.0	417.5	417.5	418.1	416.8	416.0	416.8	417.5
35°	379.8	381.1	382.6	381.9	382.6	383.4	382.6	383.4	381.1	381.9	381.9
37.5°	342.6	344.1	344.1	341.9	343.4	343.4	341.9	341.9	340.5	341.9	339.0
40°	303.5	302.0	302.8	301.2	299.9	299.9	299.1	296.2	294.8	295.5	296.2
42.5°	265.0	265.0	262.8	259.1	255.5	255.5	253.4	251.9	249.0	250.5	249.8
45°	232.4	228.6	225.8	220.0	217.8	216.4	212.8	209.1	207.6	208.4	207.6
47.5°	201.1	198.2	190.9	183.0	180.8	178.6	174.2	169.9	168.4	167.0	167.0
50°	175.0	169.9	161.9	153.1	149.5	145.9	140.1	135.8	132.9	133.6	133.6
52.5°	151.0	145.2	135.8	124.9	120.5	116.1	111.1	106.0	103.9	103.1	103.1
55°	130.0	123.4	114.0	101.6	98.0	92.9	86.4	80.6	77.6	77.0	78.4
57.5°	111.1	105.2	94.4	82.0	77.6	72.6	66.1	61.0	57.4	56.6	57.4
60°	95.9	87.9	78.4	66.8	61.0	56.6	49.4	45.0	41.4	39.9	40.6
62.5°	80.6	73.4	63.9	52.2	47.9	43.5	37.0	32.0	29.0	28.4	29.0
65°	69.0	61.8	53.0	42.9	38.5	34.1	28.4	23.2	21.0	20.4	21.0
67.5°	57.4	50.9	43.5	34.1	30.5	26.9	21.0	17.4	14.5	13.8	14.5
70°	46.5	40.6	33.4	26.9	23.2	20.4	16.0	12.4	10.1	9.5	10.1
72.5°	34.9	30.5	25.4	19.6	17.4	15.2	11.6	8.8	7.2	6.5	7.2
75°	25.4	21.8	18.1	13.8	12.4	10.9	8.0	5.8	5.1	4.4	5.1
77.5°	17.4	15.2	12.4	9.5	8.0	7.2	5.1	4.4	3.6	2.9	2.9
80°	11.6	10.1	8.0	6.5	5.8	5.1	3.6	2.9	2.1	2.1	2.1
82.5°	7.2	5.8	5.1	3.6	2.9	2.9	2.1	1.5	1.5	1.5	1.5
85°	4.4	3.6	2.9	2.1	1.5	1.5	0.8	0.8	0.8	0.8	0.8
87.5°	2.1	1.5	1.5	0.8	0.8	0.8	0.8	0.8	0.0	0.0	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: P252654

CATALOG NUMBER: LE_6B10D010 EC6B10209027 6LBDW1H

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	513.2	513.2	513.2	513.2	513.2	513.2	513.2	513.2	513.2	513.2	513.2
2.5°	513.2	511.9	511.9	512.5	513.2	514.0	512.5	511.9	511.9	514.0	512.5
5°	513.2	512.5	512.5	512.5	514.0	514.8	513.2	512.5	513.2	515.5	514.8
7.5°	515.5	514.0	514.8	514.8	515.5	516.9	515.5	514.8	515.5	517.6	516.1
10°	516.9	515.5	516.1	515.5	517.6	518.4	516.9	516.1	516.9	519.8	519.1
12.5°	517.6	516.9	516.9	516.1	518.4	519.1	517.6	516.9	517.6	519.8	519.1
15°	516.1	515.5	515.5	515.5	516.9	518.4	516.1	515.5	515.5	517.6	516.9
17.5°	513.2	511.9	511.9	511.9	512.5	513.2	511.1	510.4	509.6	511.9	511.1
20°	508.1	506.8	505.2	505.2	506.0	506.0	504.5	502.4	502.4	503.1	501.6
22.5°	498.8	498.0	496.6	495.9	497.2	496.6	493.6	491.5	490.8	491.5	490.0
25°	485.6	484.2	483.5	482.8	483.5	482.8	479.9	477.0	477.0	477.0	474.8
27.5°	467.5	466.1	465.4	465.4	466.1	464.6	461.8	458.9	457.4	457.4	455.2
30°	444.2	444.2	443.6	442.9	442.1	442.1	437.8	434.9	433.4	434.1	432.6
32.5°	416.0	415.2	414.5	412.4	413.1	412.4	408.8	406.5	404.4	402.9	402.2
35°	379.8	379.8	379.0	379.0	379.0	378.2	374.6	372.4	371.0	370.2	368.1
37.5°	339.8	339.0	338.2	338.2	338.2	338.2	336.1	334.0	334.0	333.2	331.8
40°	294.8	295.5	296.2	295.5	297.6	299.9	296.9	295.5	294.8	296.9	294.0
42.5°	251.2	250.5	254.1	254.9	254.9	258.5	259.1	259.9	259.1	260.6	260.6
45°	209.1	208.4	212.0	213.5	217.1	221.4	223.6	227.2	228.6	230.1	228.6
47.5°	169.1	172.0	175.0	178.6	181.5	188.8	193.1	196.8	198.2	200.4	200.4
50°	135.8	138.6	143.8	146.6	150.2	159.0	166.2	171.4	174.2	176.4	175.6
52.5°	104.5	109.6	116.1	119.0	124.1	134.2	142.2	148.1	151.8	153.9	154.6
55°	80.6	85.0	91.5	95.9	100.9	111.8	122.0	128.5	132.1	135.0	136.5
57.5°	59.5	64.6	71.9	75.5	81.2	93.6	102.4	110.4	114.8	118.4	119.0
60°	43.5	48.6	55.1	59.5	65.4	77.6	87.9	95.1	100.1	103.1	104.5
62.5°	31.2	36.2	42.9	47.2	52.2	63.1	73.4	80.6	85.6	89.2	91.5
65°	22.5	27.6	34.1	37.8	42.1	52.2	61.8	69.0	74.0	78.4	79.9
67.5°	16.8	20.4	26.1	29.8	34.1	42.1	50.1	56.6	61.8	65.4	66.8
70°	12.4	15.2	20.4	22.5	25.4	32.6	39.2	45.0	49.4	52.2	53.8
72.5°	8.8	10.9	14.5	16.8	18.9	24.6	29.8	34.1	37.0	39.9	41.4
75°	5.8	7.2	10.1	11.6	13.1	17.4	21.0	24.6	26.9	29.0	29.8
77.5°	3.6	5.1	7.2	8.0	9.5	11.6	14.5	16.8	18.1	19.6	21.0
80°	2.1	2.9	4.4	5.1	5.8	8.0	9.5	10.9	12.4	13.8	14.5
82.5°	1.5	2.1	2.9	2.9	3.6	4.4	5.8	7.2	8.0	8.8	9.5
85°	0.8	0.8	1.5	1.5	2.1	2.1	2.9	3.6	4.4	5.1	5.8
87.5°	0.8	0.8	0.8	0.8	1.5	1.5	2.1	2.1	2.1	2.9	2.9
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: P252654

CATALOG NUMBER: LE_6B10D010 EC6B10209027 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	513.2	513.2	513.2	513.2	513.2	513.2	513.2	513.2
2.5°	511.1	513.2	511.1	512.5	511.9	511.9	511.1	511.9
5°	513.2	516.1	513.2	515.5	514.0	514.0	514.0	514.8
7.5°	515.5	518.4	516.1	518.4	517.6	516.9	516.9	518.4
10°	517.6	519.8	518.4	520.5	519.8	519.1	519.1	520.5
12.5°	517.6	520.5	519.1	521.2	520.5	519.8	519.8	520.5
15°	515.5	519.1	516.9	519.1	518.4	517.6	517.6	519.1
17.5°	508.9	511.9	510.4	511.9	511.9	511.1	511.9	512.5
20°	500.2	502.4	500.9	502.4	502.4	500.9	501.6	502.4
22.5°	487.9	490.0	488.6	490.0	489.2	488.6	488.6	487.9
25°	472.6	475.5	473.4	474.8	473.4	471.9	471.9	472.6
27.5°	453.8	455.9	453.0	454.5	453.0	451.5	451.5	450.9
30°	429.0	429.8	427.6	429.0	427.6	426.9	425.4	425.4
32.5°	399.2	400.0	397.9	397.9	396.4	396.4	393.5	395.6
35°	364.5	365.1	364.5	363.8	361.5	360.8	360.1	360.1
37.5°	328.1	328.1	326.0	325.2	323.8	322.4	323.0	320.9
40°	291.1	290.4	288.2	289.0	288.2	286.0	285.2	284.6
42.5°	256.2	256.2	254.1	254.9	253.4	252.6	250.5	251.2
45°	225.8	225.8	223.6	223.6	222.9	220.8	221.4	220.0
47.5°	198.2	198.2	197.5	197.5	195.2	194.6	194.6	194.6
50°	174.2	174.2	174.2	174.2	173.5	172.8	172.0	172.8
52.5°	153.9	155.4	154.6	154.6	153.9	153.1	152.5	152.5
55°	135.8	136.5	136.5	137.2	136.5	135.8	136.5	135.8
57.5°	119.8	121.2	121.2	121.2	121.2	121.2	120.5	119.8
60°	106.0	106.8	106.8	107.5	107.5	107.5	106.8	106.8
62.5°	92.2	93.6	94.4	94.4	95.1	94.4	94.4	94.4
65°	81.2	82.8	83.5	82.8	83.5	83.5	82.8	82.8
67.5°	68.2	69.8	69.8	69.8	69.8	70.4	69.8	69.8
70°	55.1	56.6	55.9	56.6	56.6	56.6	56.6	56.6
72.5°	42.1	42.9	43.5	43.5	44.2	43.5	43.5	43.5
75°	30.5	32.0	32.0	32.0	32.0	32.6	32.6	32.6
77.5°	21.8	22.5	22.5	23.2	23.2	23.2	23.2	24.0
80°	15.2	15.2	16.0	16.0	16.8	16.8	16.8	16.8
82.5°	10.1	10.9	10.9	10.9	10.9	10.9	10.9	10.9
85°	5.8	6.5	6.5	6.5	6.5	7.2	7.2	7.2
87.5°	3.6	3.6	3.6	3.6	3.6	3.6	2.9	2.9
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)