

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: P252556

Luminaire Tested: **LE_6B10D010 EC6B10209730 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252556
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-8)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B10D010 EC6B10209730 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 97CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 988.7 lumens
Efficiency: N/A
Efficacy: 98.9 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.22 / 1.15
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

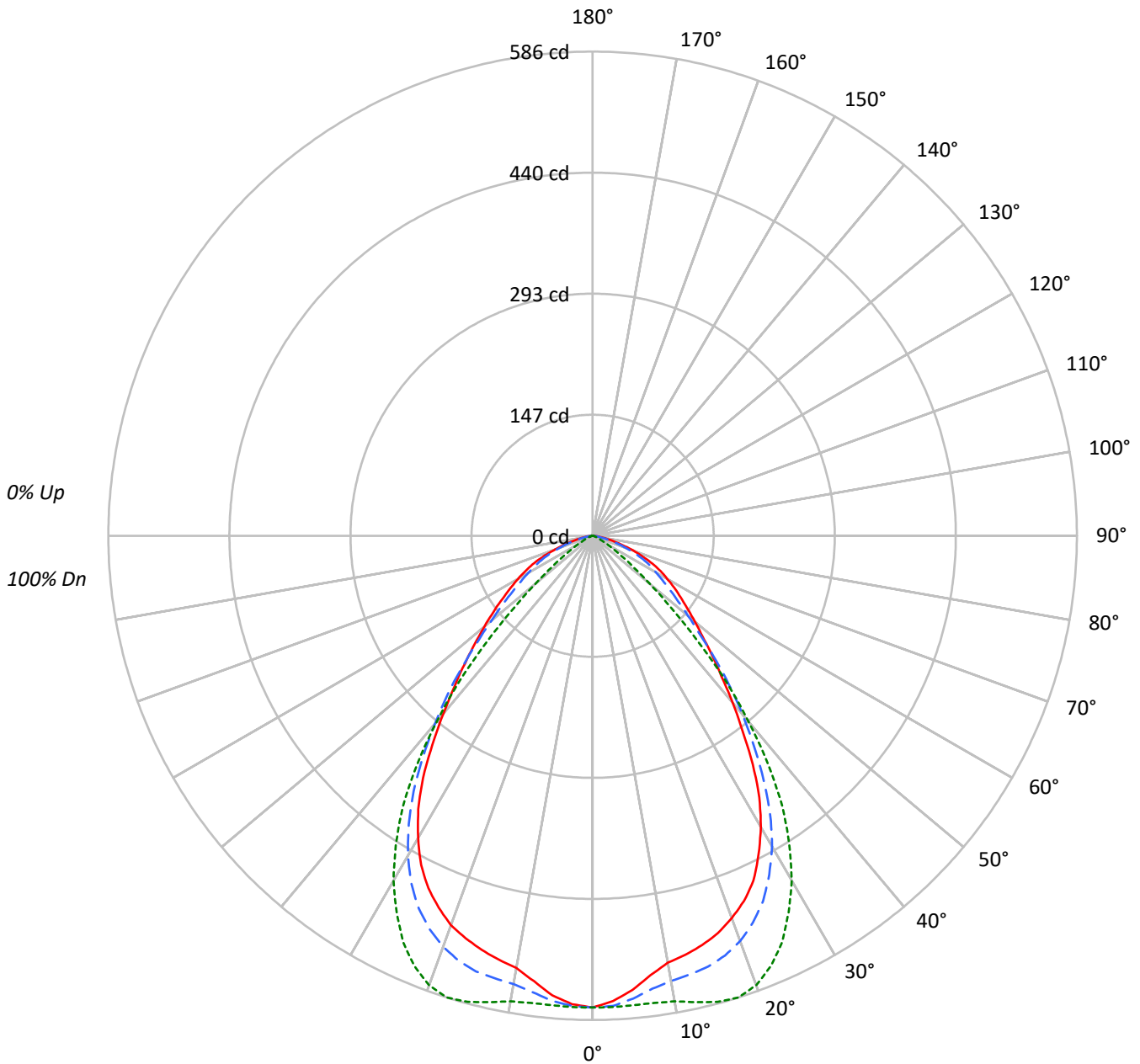
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252556

CATALOG NUMBER: LE_6B10D010 EC6B10209730 6LBDW1LI

Luminous Intensity Polar Plot





TEST NUMBER: P252556

CATALOG NUMBER: LE_6B10D010 EC6B10209730 6LBDW1LI

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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89																			
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79																			
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70																			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62																			
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56																			
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50																			
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46																			
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42																			
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38																			
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	37246	37246	37246
5°	36137	37342	36570
10°	34753	37900	35190
15°	34636	39445	35041
20°	34186	40185	34818
25°	33156	39052	33869
30°	30676	36296	31821
35°	26912	31905	28497
40°	22433	25005	23889
45°	18877	16506	20160
50°	16341	9043	17346
55°	14787	4800	15151
60°	13596	2492	13596
65°	12334	1328	12026
70°	9938	763	9175
75°	6806	504	6327
80°	4471	225	3945
85°	2994	449	2395



TEST NUMBER: P252556

CATALOG NUMBER: LE_6B10D010 EC6B10209730 6LBDW1LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.2	5.4
10°-20°	153.9	15.6
20°-30°	227.4	23.0
30°-40°	229.7	23.2
40°-50°	158.3	16.0
50°-60°	90.9	9.2
60°-70°	52.9	5.4
70°-80°	19.3	2.0
80°-90°	2.9	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°	434.6	44.0
0°-40°	664.3	67.2
0°-60°	913.6	92.4
0°-90°	988.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	988.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	571	571	571	571	571	
5°	552	562	570	565	558	52
15°	513	540	584	546	519	144
25°	461	488	542	498	470	210
35°	338	361	401	378	358	210
45°	205	207	179	220	218	159
55°	130	114	42	119	133	117
65°	80	67	9	67	78	78
75°	27	22	2	21	25	30
85°	4	2	1	3	3	5
90°	0	0	0	0	0	



TEST NUMBER: P252556

CATALOG NUMBER: LE_6B10D010 EC6B10209730 6LBDW1LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	570.9	570.9	570.9	570.9	570.9	570.9	570.9	570.9	570.9	570.9	570.9
2.5°	563.6	564.2	564.9	564.2	564.9	567.5	565.6	566.9	566.9	567.5	569.5
5°	551.8	551.8	553.0	552.4	554.4	557.0	555.0	557.0	557.6	559.0	562.2
7.5°	536.5	536.5	537.2	537.2	539.9	542.5	541.1	543.8	546.4	549.1	553.0
10°	524.6	526.0	526.0	526.6	529.2	532.6	531.9	535.2	537.9	541.9	547.1
12.5°	519.4	520.0	520.0	521.4	524.0	527.2	526.6	530.0	533.9	538.5	543.8
15°	512.8	514.1	513.5	514.8	517.4	520.8	520.0	523.4	528.0	532.6	539.9
17.5°	504.2	504.9	505.5	505.5	508.1	510.8	510.8	514.1	519.4	524.6	532.6
20°	492.4	493.6	493.6	494.2	496.2	500.2	499.6	502.9	508.1	513.5	522.0
22.5°	478.5	479.1	479.1	479.8	483.1	485.0	485.8	488.4	493.0	498.9	506.9
25°	460.6	461.2	460.6	462.6	464.0	467.9	466.6	469.9	475.1	479.8	487.8
27.5°	434.9	436.2	436.2	436.9	440.1	443.5	443.5	446.8	451.4	454.8	462.6
30°	407.2	409.1	407.2	410.5	411.8	414.5	416.4	418.4	422.4	427.0	434.2
32.5°	375.5	374.9	375.5	376.9	380.8	382.8	384.1	386.1	390.0	394.0	399.9
35°	337.9	339.2	339.9	342.5	342.5	345.9	346.5	347.8	353.8	356.4	361.0
37.5°	298.2	299.6	300.2	301.6	304.2	305.5	307.5	309.5	313.5	318.1	320.8
40°	263.4	263.4	264.0	265.2	267.2	268.0	269.9	272.5	275.2	279.1	281.8
42.5°	230.4	231.0	230.4	231.6	233.6	236.2	235.6	238.9	239.5	242.2	244.1
45°	204.6	204.6	203.2	204.6	204.6	207.2	206.6	207.9	207.2	208.5	207.2
47.5°	180.1	180.9	180.1	180.9	180.9	180.9	181.5	180.1	180.9	178.9	174.9
50°	161.0	161.6	160.4	161.0	160.4	159.8	160.4	158.4	157.8	155.1	151.1
52.5°	144.5	143.9	143.2	143.2	143.2	142.5	141.9	139.9	137.9	135.2	130.6
55°	130.0	129.4	128.8	128.8	127.4	126.8	126.8	124.8	122.8	119.5	114.1
57.5°	116.8	116.1	115.5	115.5	114.9	113.5	113.5	111.5	108.9	104.9	100.2
60°	104.2	104.2	104.2	103.6	103.6	102.2	102.2	100.2	97.6	93.8	88.4
62.5°	93.0	92.4	92.4	92.4	92.4	91.8	91.1	89.8	87.1	83.1	78.5
65°	79.9	79.9	79.9	79.9	79.2	79.2	79.2	77.2	75.9	71.9	67.4
67.5°	65.4	65.4	65.4	65.4	64.6	65.4	65.4	64.0	62.8	58.8	54.8
70°	52.1	51.5	50.9	51.5	50.9	50.9	51.5	50.1	49.5	46.2	42.2
72.5°	38.2	38.9	38.2	38.2	38.2	37.6	38.2	37.6	36.2	33.6	31.0
75°	27.0	27.8	27.8	27.0	27.0	27.0	26.4	26.4	25.1	23.1	21.8
77.5°	18.5	18.5	18.5	18.5	17.9	17.9	17.9	17.1	16.5	15.1	13.9
80°	11.9	11.9	11.9	11.9	11.2	11.2	11.2	10.5	10.5	9.2	7.9
82.5°	7.2	7.2	7.2	7.2	7.2	7.2	6.6	6.6	6.0	5.2	4.6
85°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.2	3.2	2.6	2.0
87.5°	1.4	1.4	2.0	2.0	2.0	2.0	2.0	2.0	1.4	1.4	1.4
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: P252556

CATALOG NUMBER: LE_6B10D010 EC6B10209730 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	570.9	570.9	570.9	570.9	570.9	570.9	570.9	570.9	570.9	570.9	570.9
2.5°	568.2	568.9	568.9	568.9	570.9	571.5	569.5	567.5	571.5	570.9	572.1
5°	561.6	563.6	564.9	565.6	567.5	568.9	566.9	566.2	569.5	570.2	570.9
7.5°	553.8	557.0	560.2	561.6	564.2	565.6	564.9	564.9	568.9	570.2	570.2
10°	548.4	553.0	557.0	560.2	563.6	565.6	565.6	566.2	570.9	572.1	573.5
12.5°	547.1	553.0	558.4	562.9	565.6	568.9	569.5	571.5	576.1	578.1	578.1
15°	543.8	551.8	558.4	564.2	568.2	572.1	573.5	577.5	582.8	584.0	585.4
17.5°	537.9	545.8	553.8	561.0	566.2	569.5	573.5	577.5	584.0	586.0	586.8
20°	527.2	536.5	544.5	551.8	557.0	561.6	565.6	570.2	576.1	578.8	579.4
22.5°	511.5	520.8	528.6	536.5	541.9	545.8	549.8	555.0	561.0	563.6	563.6
25°	492.4	500.9	509.5	515.4	520.8	525.4	527.2	533.2	539.1	542.5	542.5
27.5°	467.9	475.9	483.8	490.4	493.6	497.6	500.9	506.1	510.8	513.5	516.1
30°	436.9	444.8	452.1	458.6	462.6	466.6	469.9	473.9	478.5	481.8	482.4
32.5°	403.2	409.9	417.1	423.6	427.6	429.0	432.2	436.2	440.1	442.9	443.5
35°	366.2	370.9	375.5	381.5	385.4	385.4	388.8	391.4	394.6	400.6	399.2
37.5°	322.8	329.4	332.6	334.6	337.2	339.9	340.5	343.9	347.8	349.1	351.1
40°	281.8	283.8	285.8	285.8	288.4	288.4	288.4	289.0	293.0	293.6	296.4
42.5°	240.9	240.9	238.9	236.9	237.6	236.9	233.6	233.6	235.6	238.2	238.2
45°	202.6	198.0	192.0	187.4	184.1	182.8	178.9	178.9	178.1	178.9	181.5
47.5°	170.2	162.4	152.5	143.2	139.9	137.2	131.4	128.8	127.4	128.0	129.4
50°	143.2	134.6	123.4	112.2	106.2	103.0	95.8	91.1	90.4	89.1	91.8
52.5°	123.4	112.9	101.0	87.8	81.9	76.5	68.6	64.6	62.0	62.0	62.8
55°	106.2	95.0	81.9	68.6	62.8	58.8	50.9	45.5	42.9	42.2	44.2
57.5°	91.8	81.1	68.0	54.8	48.9	44.2	36.2	31.6	29.8	28.4	29.0
60°	80.5	70.0	56.8	44.2	38.9	33.6	27.0	21.8	19.1	19.1	19.8
62.5°	70.0	60.0	48.1	36.2	31.6	27.0	19.8	15.1	13.2	12.5	13.2
65°	59.4	50.1	40.2	30.4	25.8	21.8	15.9	11.9	9.2	8.6	9.2
67.5°	48.1	40.9	32.4	24.4	20.5	17.1	11.9	8.6	6.6	6.0	6.6
70°	37.6	31.0	24.4	17.9	15.1	12.5	8.6	6.6	4.6	4.0	4.6
72.5°	27.0	22.5	17.1	12.5	10.5	8.6	6.0	4.6	3.2	2.6	3.2
75°	18.5	15.1	11.2	7.9	6.6	6.0	4.0	2.6	2.0	2.0	2.0
77.5°	11.9	9.2	7.2	5.2	4.0	3.2	2.0	1.4	1.4	1.4	1.4
80°	6.6	5.2	4.0	2.6	2.0	2.0	1.4	1.4	0.6	0.6	0.6
82.5°	4.0	2.6	2.0	1.4	1.4	0.6	0.6	0.6	0.6	0.6	0.6
85°	2.0	1.4	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
87.5°	0.6	0.6	0.6	0.6	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: P252556

CATALOG NUMBER: LE_6B10D010 EC6B10209730 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	570.9	570.9	570.9	570.9	570.9	570.9	570.9	570.9	570.9	570.9	570.9
2.5°	569.5	570.2	568.2	570.9	568.9	571.5	571.5	568.9	569.5	568.2	570.9
5°	568.2	568.2	566.9	568.9	566.2	568.9	568.2	563.6	564.9	562.2	564.9
7.5°	568.2	566.9	564.9	566.9	563.6	565.6	562.9	558.4	557.0	553.8	553.8
10°	570.2	568.2	565.6	566.2	562.9	563.6	559.6	553.0	551.0	547.1	545.8
12.5°	574.9	572.9	568.9	570.2	565.6	565.6	560.2	552.4	548.4	543.1	541.9
15°	581.4	578.1	573.5	574.1	569.5	566.9	560.2	551.0	545.8	538.5	536.5
17.5°	582.8	579.4	573.5	573.5	567.5	564.2	556.4	545.8	539.1	531.9	528.0
20°	575.5	572.1	565.6	564.9	559.6	555.0	546.4	535.9	529.2	521.4	518.0
22.5°	560.2	556.4	550.4	549.8	544.5	541.9	532.6	522.0	515.4	507.5	504.9
25°	537.9	535.9	530.0	529.2	524.6	521.4	513.5	503.5	497.6	489.6	487.0
27.5°	511.5	509.5	503.5	503.5	498.2	496.2	489.0	479.8	475.1	467.9	464.6
30°	479.8	477.1	473.9	473.1	468.6	466.6	460.0	451.4	446.8	440.9	439.5
32.5°	442.1	440.1	438.2	437.5	432.9	431.0	426.4	417.8	413.8	408.5	406.5
35°	398.6	397.2	395.2	394.6	392.6	390.8	386.1	379.5	377.5	373.5	371.5
37.5°	348.5	349.8	348.5	348.5	346.5	347.1	343.1	339.2	337.2	334.6	333.2
40°	294.4	297.0	299.0	299.0	298.2	300.9	300.2	297.0	296.4	295.0	294.4
42.5°	239.5	240.9	244.9	247.5	246.9	253.4	254.1	256.8	258.8	257.4	258.0
45°	182.1	186.1	191.4	194.0	197.4	205.9	210.5	215.8	220.4	223.0	222.4
47.5°	131.4	136.0	141.9	145.9	151.8	162.4	174.2	180.9	187.4	190.8	194.0
50°	95.0	99.6	106.9	112.9	116.8	131.4	143.9	152.5	159.8	164.4	167.6
52.5°	66.6	71.9	79.9	85.1	91.1	104.9	119.5	129.4	137.2	143.2	146.5
55°	46.2	52.1	59.4	64.6	71.2	85.8	99.6	110.2	118.8	124.1	128.0
57.5°	32.4	37.6	44.9	49.5	56.1	70.0	83.9	94.4	103.0	108.2	112.9
60°	21.8	27.0	34.4	38.9	44.2	58.1	70.6	81.9	89.8	95.0	99.6
62.5°	15.1	19.8	27.0	31.6	36.2	48.1	60.0	70.0	77.9	83.9	87.8
65°	11.9	15.9	21.8	25.8	30.4	40.2	50.1	58.8	66.6	72.6	75.2
67.5°	8.6	12.5	17.1	20.5	23.8	32.4	40.9	47.5	54.8	59.4	62.8
70°	6.0	8.6	12.5	15.1	17.9	24.4	31.0	37.0	42.2	45.5	48.1
72.5°	4.6	6.0	8.6	10.5	12.5	17.1	22.5	27.0	31.0	33.6	36.2
75°	2.6	4.0	6.0	7.2	8.6	11.9	15.1	18.5	21.1	23.1	24.4
77.5°	1.4	2.0	3.2	4.0	5.2	7.2	9.9	11.9	13.9	15.1	16.5
80°	1.4	1.4	2.0	2.0	2.6	4.0	5.2	6.6	7.9	9.2	9.9
82.5°	0.6	0.6	1.4	1.4	1.4	2.0	2.6	4.0	4.6	5.2	6.0
85°	0.6	0.6	0.6	0.6	0.6	1.4	1.4	2.0	2.6	3.2	3.2
87.5°	0.0	0.0	0.6	0.6	0.6	0.6	0.6	1.4	1.4	1.4	2.0
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: P252556

CATALOG NUMBER: LE_6B10D010 EC6B10209730 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	570.9	570.9	570.9	570.9	570.9	570.9	570.9	570.9
2.5°	568.9	570.2	569.5	570.9	568.9	568.2	569.5	567.5
5°	561.6	562.2	561.6	561.6	560.2	559.0	560.2	558.4
7.5°	550.4	550.4	548.4	548.4	545.8	544.5	544.5	543.8
10°	541.1	539.1	537.2	537.9	533.9	532.6	531.9	531.2
12.5°	536.5	535.2	531.9	531.9	528.0	526.6	526.0	525.4
15°	531.2	528.6	526.0	525.4	522.0	520.8	520.0	518.8
17.5°	522.0	520.0	516.8	516.8	513.5	512.8	511.5	510.8
20°	512.1	509.5	506.9	506.9	502.9	502.9	500.9	501.5
22.5°	498.2	496.2	493.6	493.6	490.4	489.6	487.8	487.0
25°	481.8	479.1	477.1	476.5	473.9	472.5	471.9	470.5
27.5°	460.0	458.0	456.0	454.8	451.4	450.8	448.8	449.4
30°	432.9	431.6	431.0	429.6	425.6	424.4	424.4	422.4
32.5°	403.2	401.2	399.9	398.0	394.6	394.0	392.0	392.6
35°	366.9	364.2	362.2	363.0	359.0	358.4	357.0	357.8
37.5°	329.4	326.6	324.0	323.4	320.1	320.1	318.1	318.1
40°	290.4	287.8	286.4	286.4	282.5	283.1	281.1	280.5
42.5°	255.4	252.8	252.1	251.5	249.5	248.8	246.9	247.5
45°	222.4	221.8	221.8	220.4	218.5	217.8	218.5	218.5
47.5°	193.4	194.0	193.4	193.4	192.0	193.4	192.0	192.8
50°	169.0	170.2	170.2	170.2	169.6	170.2	170.2	170.9
52.5°	148.5	150.5	149.8	150.5	149.8	151.1	150.5	151.1
55°	130.6	132.0	132.6	133.2	133.2	133.2	133.2	133.2
57.5°	114.1	116.1	116.8	117.5	117.5	118.8	117.5	117.5
60°	101.0	103.0	103.6	104.2	104.2	104.9	103.6	104.2
62.5°	89.1	91.1	91.1	91.8	91.8	91.8	90.4	91.1
65°	77.2	77.9	78.5	78.5	77.9	77.9	77.2	77.9
67.5°	64.0	64.6	64.0	64.0	63.4	63.4	62.0	62.8
70°	49.5	49.5	50.1	49.5	48.9	49.5	48.9	48.1
72.5°	37.0	37.0	37.0	36.2	36.2	35.6	36.2	36.2
75°	25.1	25.1	25.8	25.8	25.8	25.8	25.1	25.1
77.5°	16.5	16.5	16.5	16.5	17.1	16.5	16.5	16.5
80°	10.5	10.5	11.2	11.2	10.5	10.5	10.5	10.5
82.5°	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
85°	4.0	4.0	4.0	4.0	3.2	3.2	3.2	3.2
87.5°	2.0	2.0	2.0	2.0	2.0	2.0	1.4	1.4
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)