

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: P136241

Luminaire Tested: **LD6A10D010TE ERW6A10830 6LW111LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136241
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23359-R2)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6A10D010TE ERW6A10830 6LW111LI
Description: PORTFOLIO 6 INCH 60 DEGREE CUTOFF RECESSED SINGLE WALL WASH LUMINAIRE
SPECULAR CLEAR TRIM AND SPECULAR CLEAR KICKER
Light Source: (1) HIGH LUMEN LED 3000K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1204.0 lumens
Efficiency: N/A
Efficacy: 86.0 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.19 / 1.1
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

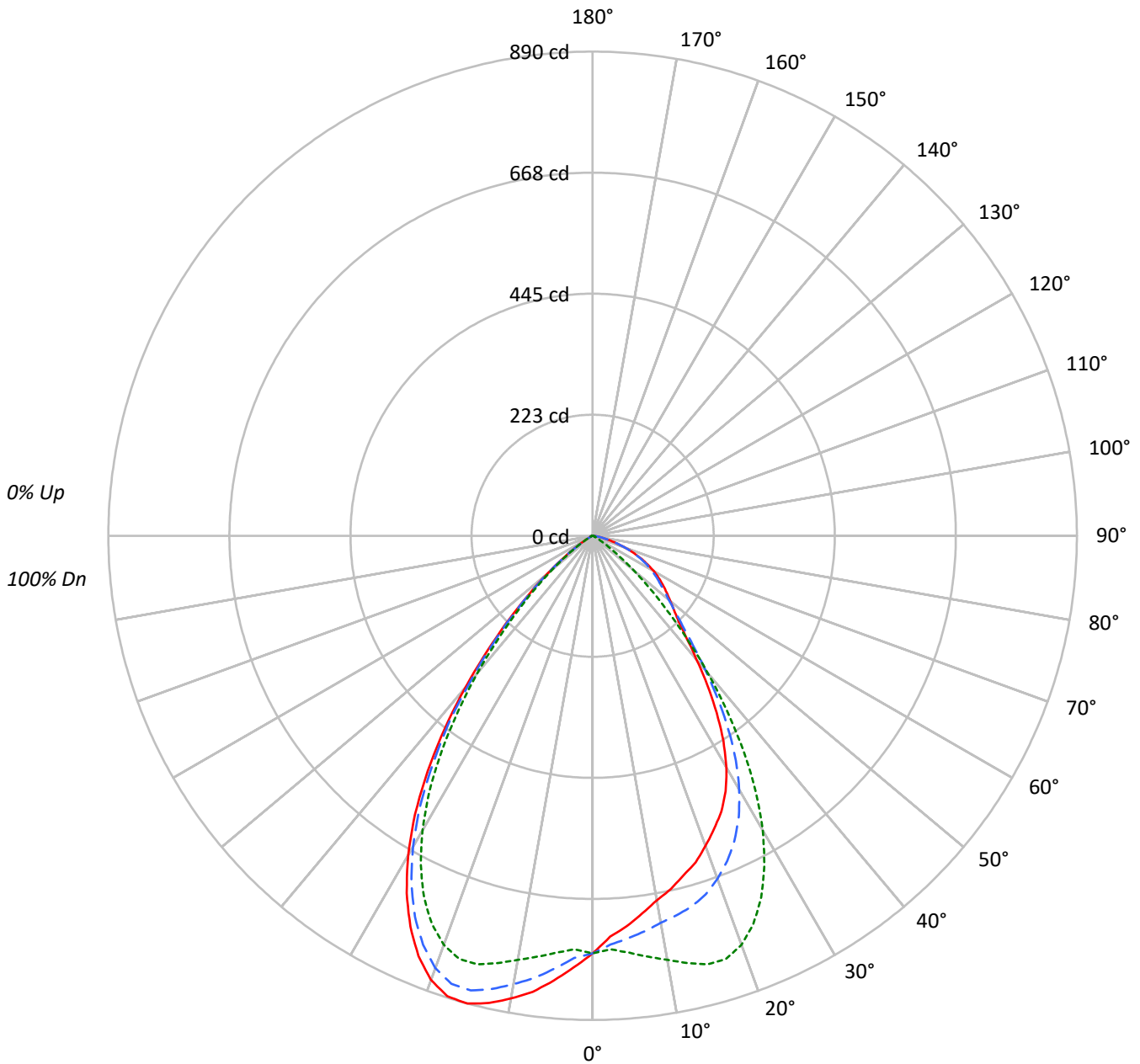
Input Watts (W): 14
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P136241

CATALOG NUMBER: LD6A10D010TE ERW6A10830 6LW111LI

Luminous Intensity Polar Plot





TEST NUMBER: P136241

CATALOG NUMBER: LD6A10D010TE ERW6A10830 6LW111LI

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	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91																			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82																			
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74																			
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	75	71	68	66																			
5	86	76	69	64	84	75	69	64	73	68	63	72	67	63	70	66	62	60																			
6	81	70	63	58	79	70	63	58	68	62	57	66	61	57	65	60	57	55																			
7	76	65	58	53	75	64	58	53	63	57	53	62	56	52	60	56	52	50																			
8	72	60	53	49	70	60	53	48	59	53	48	58	52	48	56	51	48	46																			
9	68	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	43																			
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	50079	50079	50079
5°	47179	50381	53748
10°	45061	52435	57204
15°	43625	55081	60119
20°	42108	55549	60305
25°	40268	52787	57041
30°	37041	47114	51046
35°	31659	38548	42100
40°	25320	27943	30932
45°	20630	17705	19837
50°	18868	9734	11043
55°	17926	3992	4675
60°	16884	1448	1448
65°	15082	787	664
70°	12094	649	496
75°	7991	429	429
80°	4170	338	338
85°	1946	0	0



TEST NUMBER: P136241

CATALOG NUMBER: LD6A10D010TE ERW6A10830 6LW111LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.1	6.2
10°-20°	222.0	18.4
20°-30°	319.4	26.5
30°-40°	293.4	24.4
40°-50°	168.5	14.0
50°-60°	74.4	6.2
60°-70°	36.6	3.0
70°-80°	14.0	1.2
80°-90°	1.6	0.1
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°	615.5	51.1
0°-40°	908.9	75.5
0°-60°	1151.8	95.7
0°-90°	1204.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1204.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	768	768	768	768	768	
5°	720	743	769	798	821	68
15°	646	705	816	865	890	182
25°	559	618	733	773	792	256
35°	398	435	484	511	529	247
45°	224	233	192	210	215	178
55°	158	150	35	38	41	141
65°	98	94	5	3	4	96
75°	32	33	2	2	2	35
85°	3	3	0	0	0	4
90°	0	0	0	0	0	



TEST NUMBER: P136241

CATALOG NUMBER: LD6A10D010TE ERW6A10830 6LW111LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6
2.5°	737.6	741.9	737.6	743.6	747.0	748.7	747.0	742.7	748.7	752.1	751.3
5°	720.4	723.9	720.4	726.4	730.7	735.0	733.3	730.7	737.6	742.7	743.6
7.5°	699.9	704.2	701.6	707.6	712.7	717.9	717.9	717.0	725.6	733.3	735.9
10°	680.2	683.6	681.9	687.9	693.9	699.9	701.6	702.5	711.9	722.2	728.2
12.5°	664.8	666.5	664.8	671.6	677.6	684.5	687.9	689.6	701.6	714.4	722.2
15°	645.9	650.2	648.5	655.3	662.2	669.9	674.2	677.6	690.5	705.0	716.2
17.5°	629.6	631.3	629.6	637.3	643.3	651.9	657.0	661.3	675.0	691.3	703.3
20°	606.5	609.9	609.1	615.9	622.8	630.5	635.6	639.9	654.5	670.8	684.5
22.5°	583.4	586.8	586.8	593.7	598.8	607.4	611.6	615.9	629.6	646.8	658.8
25°	559.4	562.0	561.1	567.1	573.1	581.7	585.1	589.4	602.2	617.6	628.8
27.5°	529.4	531.1	532.8	538.0	542.3	550.0	552.5	556.8	567.1	581.7	591.9
30°	491.7	493.4	496.0	500.3	503.7	511.4	513.1	516.6	526.8	538.8	548.3
32.5°	447.2	448.0	452.3	455.7	460.0	465.2	469.4	470.3	478.0	490.0	496.9
35°	397.5	398.3	402.6	405.2	409.5	414.6	418.0	418.9	425.8	435.2	439.5
37.5°	346.1	351.2	350.4	352.9	357.2	361.5	364.9	364.9	370.1	377.8	379.5
40°	297.3	299.8	302.4	304.1	307.5	311.0	313.5	313.5	317.0	322.1	322.1
42.5°	255.3	259.6	259.6	261.3	263.8	267.3	269.0	268.1	269.8	272.4	270.7
45°	223.6	225.3	226.2	228.7	229.6	233.0	233.9	232.2	233.0	233.0	227.9
47.5°	203.0	203.0	203.0	204.7	205.6	208.2	208.2	205.6	204.7	203.9	197.0
50°	185.9	185.9	186.7	188.5	189.3	190.2	190.2	186.7	185.9	182.5	173.0
52.5°	171.3	172.2	172.2	173.9	174.8	175.6	174.8	171.3	168.8	165.3	154.2
55°	157.6	158.5	159.3	161.0	161.0	161.0	160.2	156.8	154.2	149.9	138.8
57.5°	143.9	144.8	144.8	146.5	147.3	147.3	146.5	143.1	140.5	137.1	125.1
60°	129.4	129.4	130.2	131.9	131.9	132.8	131.9	129.4	126.8	122.5	112.2
62.5°	113.1	113.9	114.8	116.5	117.4	117.4	117.4	114.8	113.1	109.7	99.4
65°	97.7	97.7	98.5	100.2	100.2	102.8	101.1	99.4	97.7	94.2	85.7
67.5°	79.7	80.5	80.5	82.2	83.1	84.0	84.0	82.2	81.4	78.8	71.1
70°	63.4	63.4	64.2	65.1	66.0	66.8	66.8	66.0	65.1	62.5	56.5
72.5°	46.3	47.1	47.1	48.0	49.7	50.5	50.5	50.5	48.8	47.1	42.8
75°	31.7	32.6	32.6	33.4	34.3	35.1	35.1	35.1	34.3	33.4	30.0
77.5°	19.7	19.7	20.6	20.6	21.4	22.3	23.1	23.1	22.3	21.4	19.7
80°	11.1	11.1	12.0	12.0	12.0	12.8	13.7	13.7	13.7	12.8	11.1
82.5°	6.0	6.0	6.0	6.0	6.0	6.9	6.9	6.9	6.9	6.9	6.0
85°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
87.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
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: P136241

CATALOG NUMBER: LD6A10D010TE ERW6A10830 6LW111LI

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6
2.5°	751.3	757.3	761.6	754.7	760.7	766.7	773.6	760.7	772.7	765.8	768.4
5°	747.0	753.9	759.8	755.6	763.3	771.0	780.4	769.3	783.0	777.8	782.1
7.5°	741.0	750.4	759.0	757.3	767.6	777.8	789.8	780.4	795.0	792.4	797.5
10°	735.9	748.7	759.8	759.8	773.6	785.5	798.4	791.5	808.7	806.1	813.0
12.5°	732.4	748.7	763.3	765.8	782.1	795.8	811.2	804.4	823.2	820.7	828.4
15°	729.0	747.9	765.0	770.1	788.1	804.4	820.7	815.5	835.2	832.7	840.4
17.5°	717.9	740.1	759.0	765.8	785.5	802.7	819.8	815.5	835.2	832.7	840.4
20°	699.0	721.3	741.9	749.6	769.3	787.3	803.5	800.1	819.8	817.2	824.1
22.5°	675.0	696.5	716.2	723.9	742.7	759.0	775.3	771.8	790.7	786.4	794.1
25°	641.6	663.9	682.7	688.7	705.9	722.2	736.7	733.3	751.3	746.1	753.9
27.5°	607.4	623.6	639.1	644.2	659.6	673.3	687.0	683.6	700.7	694.7	702.5
30°	561.1	574.0	587.7	590.2	604.8	615.9	627.9	625.4	639.9	634.8	641.6
32.5°	507.1	518.3	527.7	528.6	540.5	550.0	560.2	558.5	571.4	567.1	572.2
35°	448.0	454.9	460.9	460.0	469.4	476.3	485.7	484.0	496.0	491.7	496.9
37.5°	385.5	388.9	390.6	387.2	394.1	399.2	406.1	405.2	415.5	412.0	417.2
40°	324.7	324.7	322.1	316.1	320.4	323.0	328.1	328.1	335.8	332.4	336.7
42.5°	269.0	265.6	259.6	251.0	251.9	255.3	255.3	255.3	261.3	257.9	265.6
45°	223.6	215.9	206.5	195.3	191.9	193.6	191.9	191.9	196.2	193.6	199.6
47.5°	188.5	179.0	162.8	149.1	143.1	142.2	139.6	139.6	142.2	142.2	144.8
50°	161.9	148.2	128.5	112.2	103.7	101.1	97.7	95.9	98.5	97.7	99.4
52.5°	140.5	123.4	100.2	81.4	72.8	66.8	64.2	60.8	61.7	61.7	62.5
55°	122.5	102.8	78.0	58.3	48.8	42.0	38.5	35.1	35.1	34.3	35.1
57.5°	108.8	88.2	63.4	43.7	33.4	26.6	23.1	19.7	18.8	18.8	18.8
60°	96.8	77.1	52.3	34.3	24.0	17.1	13.7	11.1	10.3	9.4	9.4
62.5°	84.8	66.8	44.5	28.3	18.0	12.8	9.4	6.9	6.0	5.1	5.1
65°	72.8	57.4	38.5	24.0	15.4	10.3	6.9	5.1	4.3	3.4	3.4
67.5°	60.0	47.1	32.6	19.7	12.8	8.6	6.0	4.3	3.4	2.6	2.6
70°	48.0	37.7	25.7	16.3	10.3	6.9	4.3	3.4	2.6	2.6	2.6
72.5°	36.0	28.3	19.7	12.0	7.7	5.1	3.4	2.6	1.7	1.7	1.7
75°	25.7	20.6	13.7	8.6	5.1	3.4	2.6	1.7	1.7	1.7	1.7
77.5°	16.3	12.8	8.6	5.1	3.4	1.7	1.7	0.9	0.9	0.9	0.9
80°	9.4	7.7	5.1	3.4	1.7	0.9	0.9	0.9	0.9	0.9	0.9
82.5°	5.1	3.4	2.6	1.7	0.9	0.9	0.9	0.0	0.0	0.0	0.0
85°	1.7	1.7	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0
87.5°	0.9	0.9	0.9	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: P136241

CATALOG NUMBER: LD6A10D010TE ERW6A10830 6LW111LI

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6
2.5°	775.3	773.6	779.5	782.1	780.4	777.0	788.1	790.7	783.0	786.4	786.4
5°	790.7	790.7	798.4	801.8	801.8	798.4	811.2	815.5	807.8	811.2	812.1
7.5°	807.8	807.8	817.2	821.5	822.4	819.8	832.7	836.1	830.9	834.4	835.2
10°	823.2	823.2	834.4	838.7	839.5	836.9	849.8	854.1	848.1	851.5	852.4
12.5°	839.5	840.4	851.5	855.8	855.8	853.2	866.1	870.4	863.5	867.8	866.9
15°	851.5	852.4	863.5	867.8	868.6	865.2	877.2	882.3	875.5	878.1	878.1
17.5°	850.7	851.5	861.8	866.1	866.1	863.5	873.8	879.8	872.9	875.5	874.6
20°	833.5	834.4	845.5	848.9	848.9	845.5	854.9	860.9	854.1	855.8	854.9
22.5°	802.7	803.5	813.8	817.2	818.1	813.8	823.2	830.1	822.4	823.2	822.4
25°	762.4	762.4	773.6	773.6	777.8	772.7	779.5	789.0	781.3	781.3	778.7
27.5°	710.2	710.2	721.3	721.3	726.4	721.3	732.4	736.7	729.9	729.0	729.0
30°	649.3	649.3	659.6	659.6	663.9	659.6	670.8	675.0	668.2	667.3	668.2
32.5°	580.0	580.0	590.2	589.4	594.5	591.1	601.4	604.8	599.7	597.1	598.8
35°	503.7	508.0	514.0	513.1	518.3	511.4	524.3	526.8	522.6	523.4	520.8
37.5°	423.2	427.5	431.8	431.8	436.0	434.3	442.0	444.6	441.2	442.0	439.5
40°	342.7	346.9	350.4	350.4	354.7	349.5	359.8	362.4	358.9	355.5	357.2
42.5°	266.4	270.7	274.1	273.3	277.6	276.7	282.7	284.4	281.8	281.0	279.3
45°	200.5	201.3	207.3	209.9	209.9	209.9	214.2	215.0	212.4	212.4	211.6
47.5°	144.8	146.5	150.8	152.5	153.3	152.5	154.2	157.6	155.1	155.1	155.9
50°	100.2	101.1	104.5	106.2	106.2	106.2	107.1	109.7	107.9	107.9	106.2
52.5°	64.2	64.2	66.8	67.7	67.7	67.7	68.5	70.2	68.5	69.4	70.2
55°	36.0	36.0	37.7	38.5	38.5	38.5	39.4	40.3	39.4	40.3	40.3
57.5°	18.8	18.8	19.7	19.7	20.6	20.6	20.6	21.4	21.4	21.4	21.4
60°	9.4	9.4	9.4	10.3	10.3	10.3	10.3	11.1	11.1	11.1	11.1
62.5°	5.1	5.1	5.1	5.1	5.1	5.1	5.1	6.0	6.0	6.0	6.0
65°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
67.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	3.4	3.4	3.4
70°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
72.5°	1.7	1.7	1.7	1.7	1.7	1.7	2.6	2.6	2.6	1.7	1.7
75°	0.9	1.7	1.7	0.9	0.9	1.7	1.7	1.7	1.7	1.7	1.7
77.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	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	0.0	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: P136241

CATALOG NUMBER: LD6A10D010TE ERW6A10830 6LW111LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	767.6	767.6	767.6	767.6
2.5°	779.5	780.4	795.0	794.1
5°	805.2	806.1	820.7	820.7
7.5°	828.4	829.2	844.7	845.5
10°	845.5	847.2	861.8	863.5
12.5°	861.8	861.8	876.4	879.8
15°	872.1	872.1	885.8	890.1
17.5°	868.6	868.6	882.3	887.5
20°	849.8	848.9	861.8	868.6
22.5°	817.2	818.1	828.4	836.1
25°	776.1	774.4	785.5	792.4
27.5°	724.7	725.6	732.4	740.1
30°	663.0	664.8	669.9	677.6
32.5°	593.7	596.2	599.7	607.4
35°	517.4	520.0	521.7	528.6
37.5°	435.2	438.6	439.5	446.3
40°	353.8	357.2	357.2	363.2
42.5°	277.6	280.1	279.3	284.4
45°	209.9	211.6	210.7	215.0
47.5°	153.3	155.1	153.3	156.8
50°	106.2	107.9	106.2	108.8
52.5°	68.5	69.4	67.7	70.2
55°	39.4	40.3	39.4	41.1
57.5°	22.3	21.4	20.6	22.3
60°	11.1	11.1	11.1	11.1
62.5°	6.0	6.0	6.0	6.0
65°	3.4	3.4	3.4	4.3
67.5°	3.4	3.4	3.4	3.4
70°	2.6	2.6	2.6	2.6
72.5°	1.7	1.7	1.7	1.7
75°	1.7	1.7	1.7	1.7
77.5°	0.9	0.9	0.9	0.9
80°	0.0	0.0	0.0	0.9
82.5°	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





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













(END OF REPORT)