

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: P136367

Luminaire Tested: **LD6A10D010TE ERW6A10940 6LW111H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136367
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23375)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6A10D010TE ERW6A10940 6LW111H
Description: PORTFOLIO 6 INCH 60 DEGREE CUTOFF RECESSED SINGLE WALL WASH LUMINAIRE
SEMI-SPECULAR CLEAR TRIM AND SPECULAR CLEAR KICKER
Light Source: (1) HIGH LUMEN LED 4000K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1081.5 lumens
Efficiency: N/A
Efficacy: 77.2 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.17 / 1.12
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

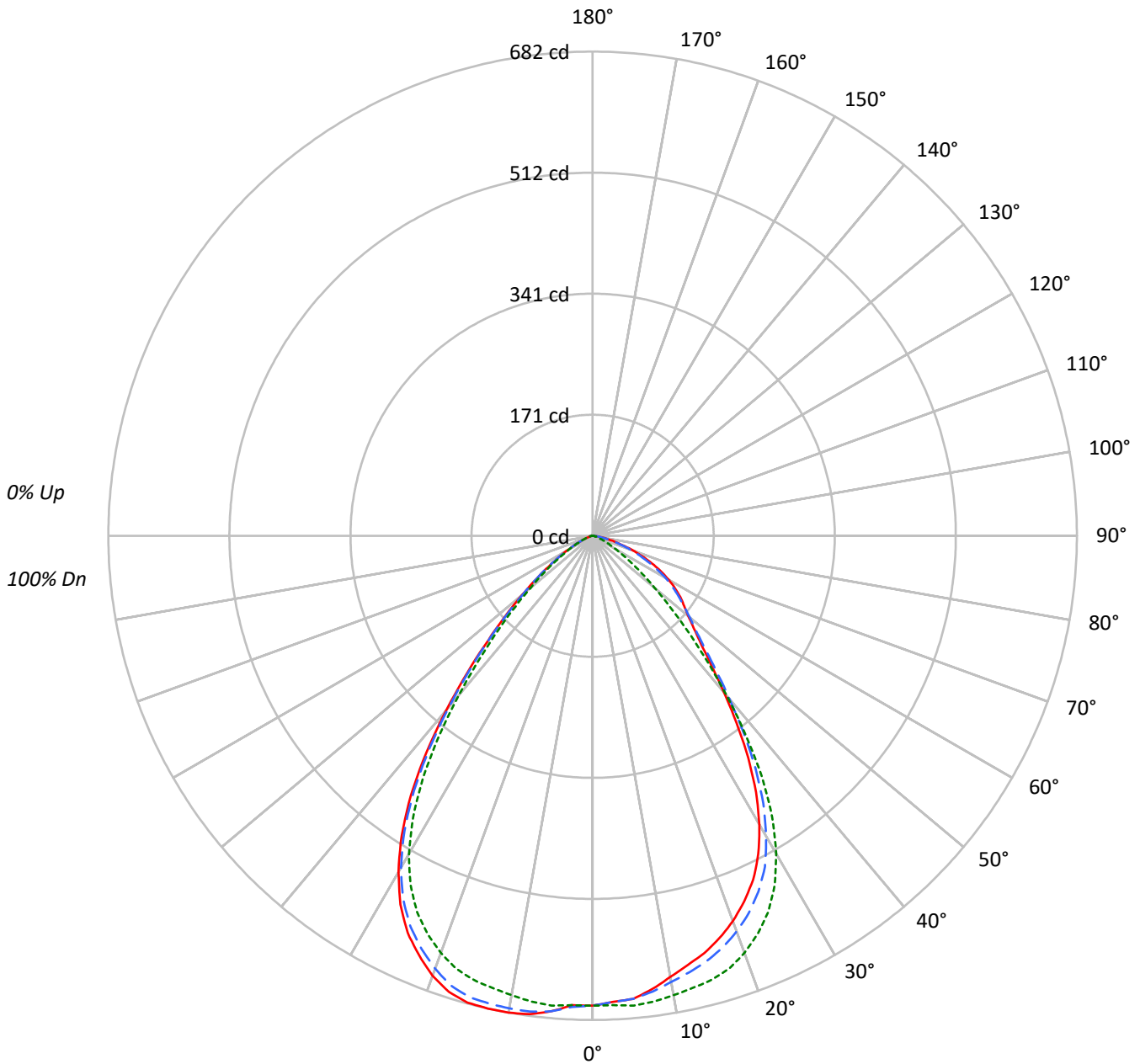
Input Watts (W): 14
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	102	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	84	82	80																			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73	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	67	61	71	65	61	70	64	60	68	63	60	58																			
6	79	68	61	56	78	68	61	55	66	60	55	64	59	55	63	58	54	52																			
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48																			
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44																			
9	66	54	47	42	65	54	47	42	53	46	42	52	46	42	51	46	42	40																			
10	62	51	44	39	61	50	43	39	49	43	39	48	43	39	48	42	39	37																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	43176	43176	43176
5°	42876	43498	44042
10°	41795	43531	45181
15°	41099	43740	45983
20°	40101	43399	45781
25°	38505	42097	44393
30°	35377	38955	41192
35°	30416	33156	35521
40°	24451	24945	27270
45°	19911	17290	19154
50°	17813	11550	13123
55°	17130	7564	8633
60°	16101	4802	5415
65°	14279	2933	3118
70°	11540	1812	1812
75°	8066	1210	1210
80°	5335	902	902
85°	2695	898	898



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.0	5.8
10°-20°	181.7	16.8
20°-30°	264.6	24.5
30°-40°	256.6	23.7
40°-50°	162.2	15.0
50°-60°	90.3	8.4
60°-70°	44.7	4.1
70°-80°	15.8	1.5
80°-90°	2.5	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°	509.3	47.1
0°-40°	765.9	70.8
0°-60°	1018.4	94.2
0°-90°	1081.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1081.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	662	662	662	662	662	
5°	655	655	664	672	672	62
15°	608	620	648	672	681	171
25°	535	553	585	607	617	244
35°	382	400	416	439	446	237
45°	216	222	187	205	208	171
55°	151	147	66	76	76	134
65°	92	85	19	20	20	91
75°	32	30	5	5	5	36
85°	4	4	1	1	1	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	661.8	661.8	661.8	661.8	661.8	661.8	661.8	661.8	661.8	661.8	661.8
2.5°	657.1	651.1	653.5	652.3	653.5	652.3	655.9	652.3	654.7	657.1	652.3
5°	654.7	648.8	649.9	649.9	649.9	649.9	653.5	649.9	652.3	654.7	651.1
7.5°	644.0	639.3	640.5	640.5	640.5	640.5	644.0	641.7	644.0	647.6	644.0
10°	630.9	626.3	628.6	628.6	628.6	628.6	633.3	630.9	633.3	638.1	634.5
12.5°	619.1	615.5	617.9	617.9	617.9	619.1	622.7	621.5	623.9	629.7	626.3
15°	608.5	604.9	607.3	607.3	607.3	608.5	612.0	613.2	615.5	620.3	617.9
17.5°	594.2	590.6	594.2	594.2	593.0	595.4	600.1	600.1	602.5	608.5	607.3
20°	577.6	574.0	577.6	577.6	576.4	578.8	583.6	584.8	587.1	593.0	591.8
22.5°	557.4	556.2	557.4	559.8	558.6	559.8	564.6	565.8	568.2	575.2	574.0
25°	534.9	533.7	536.1	537.3	536.1	537.3	542.0	543.2	545.6	552.7	552.7
27.5°	505.3	504.1	507.7	507.7	507.7	510.0	513.5	515.9	517.1	525.5	524.3
30°	469.6	468.5	470.8	472.0	472.0	472.0	476.8	480.4	481.5	488.7	488.7
32.5°	428.2	428.2	429.3	431.7	430.5	432.9	436.5	438.8	441.2	447.2	447.2
35°	381.9	383.1	384.3	386.7	385.5	386.7	390.2	392.5	393.7	399.7	398.5
37.5°	333.2	334.4	335.6	336.8	336.8	338.0	341.6	342.8	344.0	348.7	346.4
40°	287.1	287.1	288.3	290.5	289.4	291.7	294.1	295.3	295.3	298.9	296.5
42.5°	246.7	247.9	249.1	250.2	250.2	251.4	253.8	255.0	255.0	256.2	252.6
45°	215.8	217.0	217.0	219.4	219.4	220.6	221.8	223.0	221.8	221.8	218.2
47.5°	193.3	194.5	195.7	196.9	196.9	198.1	199.3	199.3	198.1	196.9	192.1
50°	175.5	177.9	177.9	179.1	180.3	181.5	181.5	181.5	179.1	177.9	170.7
52.5°	162.5	163.7	164.9	166.1	166.1	167.3	168.5	167.3	164.9	161.3	154.2
55°	150.6	151.8	153.0	154.2	154.2	154.2	154.2	153.0	150.6	147.1	140.0
57.5°	137.6	138.8	140.0	141.1	141.1	141.1	141.1	140.0	137.6	132.8	124.6
60°	123.4	124.6	125.8	126.9	126.9	126.9	125.8	124.6	122.2	118.6	110.3
62.5°	108.0	109.2	110.3	110.3	110.3	109.2	109.2	108.0	105.6	102.0	93.7
65°	92.5	92.5	93.7	93.7	93.7	93.7	92.5	91.3	89.0	85.4	79.5
67.5°	75.9	77.1	77.1	77.1	77.1	77.1	75.9	75.9	73.5	70.0	65.3
70°	60.5	60.5	61.7	61.7	61.7	61.7	60.5	60.5	58.1	55.7	51.0
72.5°	45.1	45.1	45.1	46.3	46.3	46.3	45.1	45.1	43.9	41.5	37.9
75°	32.0	32.0	32.0	33.2	33.2	33.2	33.2	32.0	30.8	29.7	27.3
77.5°	21.4	22.5	21.4	21.4	21.4	22.5	21.4	21.4	21.4	20.2	17.8
80°	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	13.0	13.0	11.8
82.5°	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	7.2	7.2
85°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
87.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	661.8	661.8	661.8	661.8	661.8	661.8	661.8	661.8	661.8	661.8	661.8
2.5°	655.9	658.3	660.6	658.3	654.7	661.8	660.6	661.8	660.6	658.3	665.4
5°	654.7	657.1	660.6	658.3	655.9	663.0	661.8	664.2	664.2	661.8	668.9
7.5°	647.6	649.9	655.9	653.5	651.1	658.3	659.4	661.8	663.0	660.6	668.9
10°	639.3	641.7	647.6	646.4	645.2	653.5	654.7	657.1	658.3	657.1	665.4
12.5°	630.9	634.5	640.5	639.3	639.3	647.6	648.8	652.3	654.7	653.5	663.0
15°	622.7	627.5	634.5	633.3	633.3	642.9	644.0	647.6	649.9	649.9	659.4
17.5°	612.0	616.7	623.9	622.7	625.1	632.1	634.5	639.3	641.7	640.5	651.1
20°	596.6	602.5	609.6	608.5	609.6	619.1	621.5	625.1	627.5	627.5	636.9
22.5°	578.8	584.8	591.8	590.6	593.0	600.1	602.5	607.3	609.6	608.5	617.9
25°	557.4	563.4	569.3	569.3	570.4	578.8	581.2	584.8	588.3	587.1	595.4
27.5°	529.0	534.9	540.8	539.7	540.8	549.1	551.5	555.1	558.6	557.4	565.8
30°	492.2	498.1	502.9	501.7	502.9	511.1	512.3	517.1	520.7	520.7	527.8
32.5°	449.5	455.4	457.8	455.4	457.8	463.8	466.2	470.8	473.2	474.4	481.5
35°	400.9	404.5	405.7	403.3	403.3	409.2	411.5	416.3	418.7	419.9	425.8
37.5°	347.6	349.8	347.6	344.0	345.2	347.6	351.0	354.6	358.2	359.4	365.3
40°	295.3	294.1	290.5	284.7	283.5	287.1	289.4	292.9	295.3	297.7	301.3
42.5°	249.1	246.7	239.6	232.4	231.2	231.2	232.4	236.0	238.4	239.6	244.3
45°	212.3	207.6	196.9	188.6	183.9	185.1	185.1	187.4	188.6	190.9	194.5
47.5°	183.9	175.5	162.5	151.8	147.1	145.9	145.9	147.1	148.3	150.6	153.0
50°	161.3	150.6	135.2	123.4	117.4	115.0	115.0	113.8	116.2	117.4	119.8
52.5°	143.5	130.4	112.6	99.6	92.5	90.1	89.0	89.0	89.0	90.1	92.5
55°	126.9	112.6	93.7	80.7	72.3	70.0	67.6	66.5	67.6	68.8	70.0
57.5°	112.6	97.2	78.3	64.1	56.9	53.3	51.0	49.8	49.8	51.0	52.1
60°	98.4	83.0	64.1	51.0	43.9	40.3	37.9	36.8	36.8	37.9	37.9
62.5°	83.0	68.8	52.1	40.3	33.2	29.7	27.3	27.3	26.1	26.1	27.3
65°	70.0	56.9	42.7	32.0	24.9	22.5	20.2	19.0	19.0	17.8	19.0
67.5°	56.9	46.3	34.4	24.9	19.0	16.6	14.2	14.2	13.0	13.0	13.0
70°	45.1	36.8	27.3	19.0	15.4	11.8	10.6	9.5	9.5	9.5	9.5
72.5°	33.2	27.3	20.2	14.2	10.6	9.5	8.3	7.2	6.0	6.0	6.0
75°	23.7	19.0	14.2	10.6	8.3	7.2	6.0	4.8	4.8	4.8	4.8
77.5°	16.6	13.0	10.6	7.2	6.0	4.8	3.6	3.6	3.6	3.6	2.4
80°	10.6	8.3	7.2	4.8	3.6	3.6	2.4	2.4	2.4	2.4	2.4
82.5°	6.0	4.8	3.6	3.6	2.4	2.4	1.2	1.2	1.2	1.2	1.2
85°	2.4	2.4	2.4	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
87.5°	1.2	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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	661.8	661.8	661.8	661.8	661.8	661.8	661.8	661.8	661.8	661.8	661.8
2.5°	658.3	663.0	663.0	665.4	661.8	664.2	667.8	666.6	663.0	664.2	665.4
5°	663.0	667.8	668.9	672.5	668.9	672.5	677.2	676.0	672.5	674.8	676.0
7.5°	663.0	668.9	671.3	674.8	672.5	676.0	682.0	680.8	677.2	679.6	682.0
10°	660.6	666.6	670.1	673.6	671.3	676.0	680.8	680.8	678.4	680.8	684.4
12.5°	658.3	664.2	667.8	671.3	668.9	674.8	680.8	679.6	678.4	680.8	684.4
15°	654.7	660.6	664.2	667.8	666.6	672.5	678.4	678.4	676.0	679.6	683.2
17.5°	646.4	652.3	657.1	659.4	658.3	664.2	670.1	670.1	667.8	671.3	674.8
20°	632.1	638.1	642.9	645.2	644.0	648.8	654.7	655.9	653.5	657.1	660.6
22.5°	614.3	619.1	623.9	626.3	625.1	629.7	635.7	636.9	634.5	638.1	640.5
25°	593.0	596.6	601.3	603.7	602.5	607.3	613.2	613.2	612.0	614.3	616.7
27.5°	563.4	568.2	571.6	574.0	574.0	577.6	582.4	583.6	582.4	584.8	588.3
30°	526.6	529.0	533.7	534.9	536.1	539.7	544.4	544.4	543.2	545.6	549.1
32.5°	480.4	483.9	487.5	488.7	489.8	493.4	496.9	498.1	496.9	499.3	502.9
35°	425.8	429.3	432.9	434.1	435.3	438.8	442.4	443.6	442.4	444.8	448.4
37.5°	365.3	367.7	371.2	372.4	374.8	377.2	379.5	381.9	380.7	383.1	385.5
40°	303.6	304.8	308.4	309.5	311.9	314.3	316.7	317.9	317.9	319.0	320.2
42.5°	245.5	247.9	250.2	251.4	253.8	255.0	257.4	258.6	258.6	259.7	260.9
45°	195.7	198.1	200.4	201.6	204.0	205.2	206.4	207.6	206.4	206.4	208.8
47.5°	154.2	156.5	158.9	160.1	161.3	162.5	163.7	163.7	163.7	164.9	164.9
50°	121.0	122.2	124.6	124.6	126.9	126.9	128.1	128.1	128.1	128.1	129.3
52.5°	93.7	94.9	97.2	97.2	98.4	99.6	99.6	99.6	99.6	100.8	99.6
55°	71.1	72.3	73.5	73.5	75.9	75.9	75.9	75.9	75.9	75.9	75.9
57.5°	53.3	54.5	55.7	55.7	55.7	56.9	55.7	56.9	56.9	56.9	56.9
60°	39.1	40.3	40.3	40.3	41.5	41.5	41.5	41.5	41.5	41.5	41.5
62.5°	27.3	27.3	28.5	28.5	28.5	29.7	28.5	28.5	29.7	29.7	28.5
65°	19.0	19.0	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2
67.5°	13.0	13.0	13.0	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2
70°	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
72.5°	6.0	6.0	6.0	6.0	7.2	7.2	7.2	7.2	7.2	7.2	7.2
75°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
77.5°	2.4	2.4	3.6	3.6	3.6	2.4	2.4	2.4	3.6	3.6	2.4
80°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
82.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
85°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.0	1.2	1.2	1.2
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: P136367

CATALOG NUMBER: LD6A10D010TE ERW6A10940 6LW111H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	661.8	661.8	<i>661.8</i>	661.8
2.5°	665.4	664.2	<i>665.4</i>	661.8
5°	676.0	674.8	<i>677.2</i>	672.5
7.5°	683.2	682.0	<i>684.4</i>	679.6
10°	<i>684.4</i>	<i>684.4</i>	<i>686.8</i>	<i>682.0</i>
12.5°	684.4	684.4	<i>686.8</i>	682.0
15°	684.4	683.2	<i>685.6</i>	680.8
17.5°	676.0	676.0	<i>678.4</i>	673.6
20°	660.6	660.6	<i>663.0</i>	659.4
22.5°	641.7	641.7	<i>642.9</i>	639.3
25°	617.9	616.7	<i>619.1</i>	616.7
27.5°	588.3	587.1	<i>588.3</i>	585.9
30°	548.0	546.8	<i>549.1</i>	546.8
32.5°	502.9	500.5	<i>502.9</i>	500.5
35°	447.2	444.8	<i>447.2</i>	446.0
37.5°	385.5	383.1	<i>385.5</i>	384.3
40°	320.2	319.0	<i>321.4</i>	320.2
42.5°	260.9	258.6	<i>260.9</i>	259.7
45°	208.8	206.4	<i>208.8</i>	207.6
47.5°	164.9	163.7	<i>166.1</i>	164.9
50°	129.3	128.1	<i>129.3</i>	129.3
52.5°	99.6	98.4	<i>99.6</i>	99.6
55°	75.9	74.7	<i>75.9</i>	75.9
57.5°	56.9	55.7	<i>56.9</i>	56.9
60°	41.5	41.5	<i>41.5</i>	41.5
62.5°	29.7	28.5	<i>29.7</i>	29.7
65°	20.2	20.2	<i>20.2</i>	20.2
67.5°	14.2	14.2	<i>14.2</i>	14.2
70°	9.5	9.5	<i>9.5</i>	9.5
72.5°	7.2	7.2	<i>7.2</i>	6.0
75°	4.8	4.8	<i>4.8</i>	4.8
77.5°	3.6	2.4	<i>3.6</i>	3.6
80°	2.4	2.4	<i>2.4</i>	2.4
82.5°	1.2	1.2	<i>1.2</i>	1.2
85°	1.2	1.2	<i>1.2</i>	1.2
87.5°	0.0	0.0	<i>0.0</i>	0.0
90°	0.0	0.0	<i>0.0</i>	0.0



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













(END OF REPORT)