

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: P136366

Luminaire Tested: **LD6A10D010TE ERW6A10935 6LW111H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136366
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 ERW6A10935 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 3500K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1059.4 lumens
Efficiency: N/A
Efficacy: 75.7 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

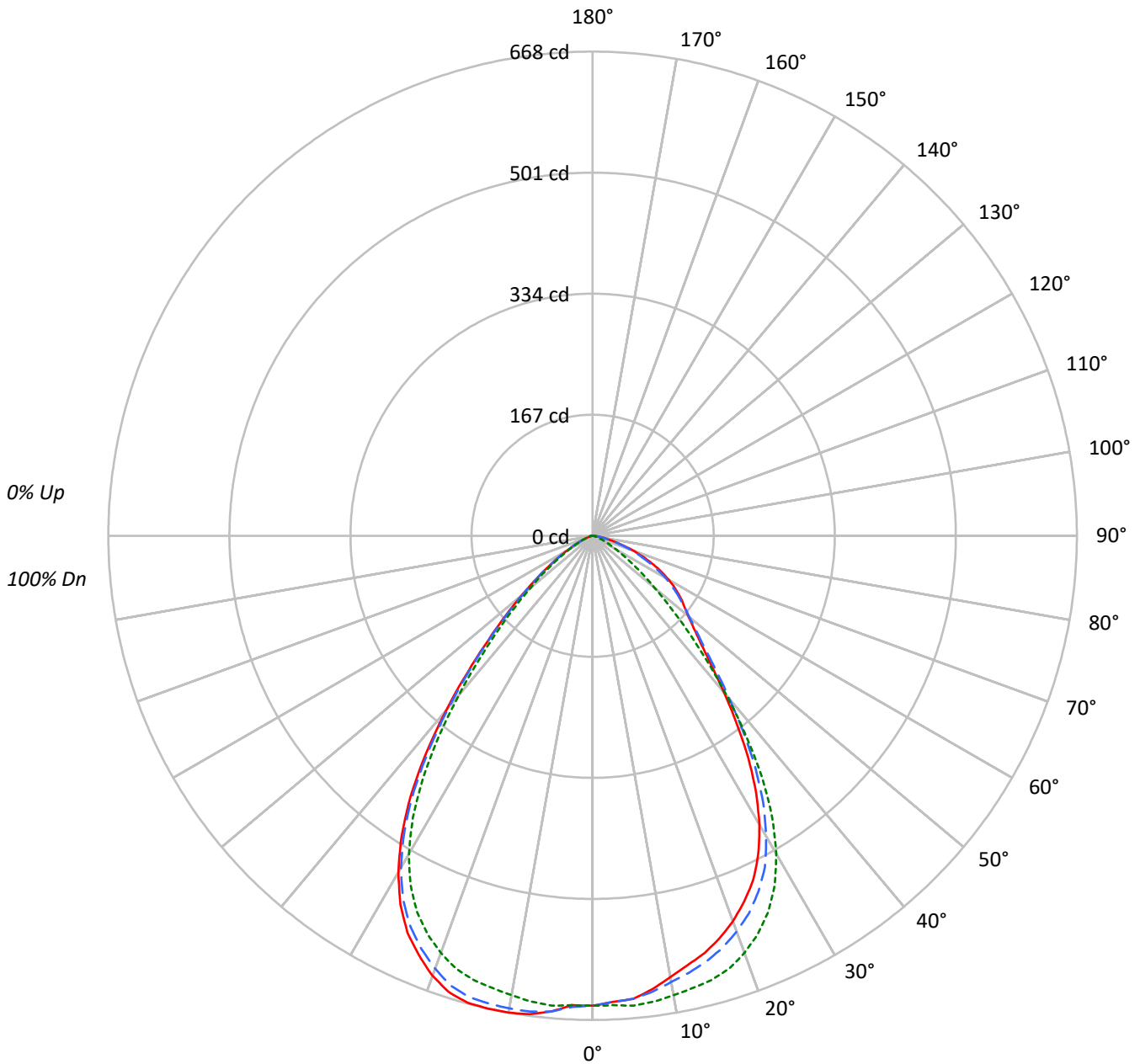
Input Watts (W): 14
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	42295	42295	42295
5°	41999	42614	43145
10°	40947	42643	44260
15°	40262	42849	45044
20°	39289	42511	44850
25°	37720	41233	43486
30°	34661	38164	40356
35°	29795	32479	34797
40°	23949	24443	26716
45°	19514	16940	18757
50°	17447	11317	12860
55°	16777	7405	8463
60°	15762	4697	5311
65°	13986	2871	3041
70°	11292	1774	1774
75°	7915	1185	1185
80°	5260	864	864
85°	2620	898	898



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.7	5.8
10°-20°	178.0	16.8
20°-30°	259.2	24.5
30°-40°	251.4	23.7
40°-50°	158.9	15.0
50°-60°	88.5	8.4
60°-70°	43.8	4.1
70°-80°	15.5	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°	498.9	47.1
0°-40°	750.3	70.8
0°-60°	997.7	94.2
0°-90°	1059.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1059.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	648	648	648	648	648	
5°	641	641	651	659	659	60
15°	596	608	634	659	667	168
25°	524	541	573	595	604	239
35°	374	392	408	430	437	232
45°	212	217	184	201	203	167
55°	148	144	65	74	74	131
65°	91	84	19	20	20	89
75°	31	29	5	5	5	35
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°	648.3	648.3	648.3	648.3	648.3	648.3	648.3	648.3	648.3	648.3	648.3
2.5°	643.7	637.9	640.2	639.0	640.2	639.0	642.5	639.0	641.3	643.7	639.0
5°	641.3	635.5	636.7	636.7	636.7	636.7	640.2	636.7	639.0	641.3	637.9
7.5°	630.9	626.3	627.5	627.5	627.5	627.5	630.9	628.6	630.9	634.4	630.9
10°	618.1	613.5	615.8	615.8	615.8	615.8	620.5	618.1	620.5	625.1	621.6
12.5°	606.5	603.0	605.3	605.3	605.3	606.5	610.0	608.8	611.1	617.0	613.5
15°	596.1	592.6	594.9	594.9	594.9	596.1	599.5	600.6	603.0	607.6	605.3
17.5°	582.1	578.6	582.1	582.1	580.9	583.3	587.9	587.9	590.3	596.1	594.9
20°	565.9	562.4	565.9	565.9	564.7	567.0	571.6	572.8	575.1	580.9	579.8
22.5°	546.1	544.9	546.1	548.4	547.2	548.4	553.1	554.2	556.6	563.5	562.4
25°	524.0	522.8	525.2	526.3	525.2	526.3	531.0	532.2	534.5	541.4	541.4
27.5°	495.0	493.8	497.3	497.3	497.3	499.6	503.1	505.5	506.6	514.7	513.5
30°	460.1	458.9	461.3	462.4	462.4	462.4	467.1	470.6	471.8	478.7	478.7
32.5°	419.4	419.4	420.6	422.9	421.7	424.1	427.6	429.9	432.2	438.1	438.1
35°	374.1	375.3	376.5	378.8	377.6	378.8	382.3	384.6	385.7	391.5	390.4
37.5°	326.5	327.6	328.8	329.9	329.9	331.1	334.6	335.8	336.9	341.6	339.3
40°	281.2	281.2	282.4	284.7	283.5	285.9	288.2	289.4	289.4	292.8	290.5
42.5°	241.7	242.8	244.0	245.2	245.2	246.3	248.7	249.8	249.8	251.0	247.5
45°	211.5	212.6	212.6	214.9	214.9	216.1	217.3	218.4	217.3	217.3	213.8
47.5°	189.4	190.6	191.7	192.9	192.9	194.1	195.2	195.2	194.1	192.9	188.2
50°	171.9	174.2	174.2	175.4	176.6	177.7	177.7	177.7	175.4	174.2	167.4
52.5°	159.2	160.4	161.5	162.7	162.7	163.9	165.0	163.9	161.5	158.0	151.0
55°	147.5	148.7	149.9	151.0	151.0	151.0	151.0	149.9	147.5	144.0	137.1
57.5°	134.8	136.0	137.1	138.3	138.3	138.3	138.3	137.1	134.8	130.2	122.0
60°	120.8	122.0	123.2	124.3	124.3	124.3	123.2	122.0	119.7	116.2	108.0
62.5°	105.8	106.9	108.0	108.0	108.0	106.9	106.9	105.8	103.4	99.9	91.8
65°	90.6	90.6	91.8	91.8	91.8	91.8	90.6	89.5	87.1	83.6	77.8
67.5°	74.4	75.6	75.6	75.6	75.6	75.6	74.4	74.4	72.1	68.6	63.9
70°	59.2	59.2	60.4	60.4	60.4	60.4	59.2	59.2	56.9	54.6	49.9
72.5°	44.2	44.2	44.2	45.3	45.3	45.3	44.2	44.2	43.0	40.7	37.2
75°	31.4	31.4	31.4	32.5	32.5	32.5	32.5	31.4	30.2	29.0	26.7
77.5°	20.9	22.0	20.9	20.9	20.9	22.0	20.9	20.9	20.9	19.7	17.4
80°	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	12.8	12.8	11.7
82.5°	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	7.0	7.0
85°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
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°	648.3	648.3	648.3	648.3	648.3	648.3	648.3	648.3	648.3	648.3	648.3
2.5°	642.5	644.8	647.2	644.8	641.3	648.3	647.2	648.3	647.2	644.8	651.8
5°	641.3	643.7	647.2	644.8	642.5	649.5	648.3	650.7	650.7	648.3	655.3
7.5°	634.4	636.7	642.5	640.2	637.9	644.8	646.0	648.3	649.5	647.2	655.3
10°	626.3	628.6	634.4	633.2	632.0	640.2	641.3	643.7	644.8	643.7	651.8
12.5°	618.1	621.6	627.5	626.3	626.3	634.4	635.5	639.0	641.3	640.2	649.5
15°	610.0	614.6	621.6	620.5	620.5	629.7	630.9	634.4	636.7	636.7	646.0
17.5°	599.5	604.1	611.1	610.0	612.3	619.3	621.6	626.3	628.6	627.5	637.9
20°	584.4	590.3	597.3	596.1	597.3	606.5	608.8	612.3	614.6	614.6	624.0
22.5°	567.0	572.8	579.8	578.6	580.9	587.9	590.3	594.9	597.3	596.1	605.3
25°	546.1	551.9	557.7	557.7	558.9	567.0	569.3	572.8	576.3	575.1	583.3
27.5°	518.2	524.0	529.8	528.7	529.8	537.9	540.2	543.7	547.2	546.1	554.2
30°	482.2	488.0	492.6	491.5	492.6	500.8	502.0	506.6	510.0	510.0	517.0
32.5°	440.4	446.1	448.4	446.1	448.4	454.3	456.6	461.3	463.6	464.8	471.8
35°	392.7	396.2	397.4	395.0	395.0	400.9	403.2	407.8	410.2	411.3	417.1
37.5°	340.4	342.8	340.4	336.9	338.1	340.4	343.9	347.4	350.9	352.1	357.8
40°	289.4	288.2	284.7	278.9	277.7	281.2	283.5	287.0	289.4	291.6	295.1
42.5°	244.0	241.7	234.7	227.8	226.6	226.6	227.8	231.2	233.5	234.7	239.3
45°	208.0	203.3	192.9	184.7	180.1	181.2	181.2	183.6	184.7	187.1	190.6
47.5°	180.1	171.9	159.2	148.7	144.0	142.9	142.9	144.0	145.2	147.5	149.9
50°	158.0	147.5	132.5	120.8	115.0	112.7	112.7	111.5	113.8	115.0	117.3
52.5°	140.5	127.8	110.3	97.6	90.6	88.3	87.1	87.1	87.1	88.3	90.6
55°	124.3	110.3	91.8	79.0	70.9	68.6	66.2	65.1	66.2	67.4	68.6
57.5°	110.3	95.3	76.7	62.7	55.8	52.3	49.9	48.8	48.8	49.9	51.1
60°	96.5	81.3	62.7	49.9	43.0	39.5	37.2	36.0	36.0	37.2	37.2
62.5°	81.3	67.4	51.1	39.5	32.5	29.0	26.7	26.7	25.5	25.5	26.7
65°	68.6	55.8	41.9	31.4	24.4	22.0	19.7	18.6	18.6	17.4	18.6
67.5°	55.8	45.3	33.7	24.4	18.6	16.2	14.0	14.0	12.8	12.8	12.8
70°	44.2	36.0	26.7	18.6	15.1	11.7	10.5	9.3	9.3	9.3	9.3
72.5°	32.5	26.7	19.7	14.0	10.5	9.3	8.2	7.0	5.8	5.8	5.8
75°	23.2	18.6	14.0	10.5	8.2	7.0	5.8	4.7	4.7	4.7	4.7
77.5°	16.2	12.8	10.5	7.0	5.8	4.7	3.5	3.5	3.5	3.5	2.3
80°	10.5	8.2	7.0	4.7	3.5	3.5	2.3	2.3	2.3	2.3	2.3
82.5°	5.8	4.7	3.5	3.5	2.3	2.3	1.2	1.2	1.2	1.2	1.2
85°	2.3	2.3	2.3	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°	648.3	648.3	648.3	648.3	648.3	648.3	648.3	648.3	648.3	648.3	648.3
2.5°	644.8	649.5	649.5	651.8	648.3	650.7	654.2	653.0	649.5	650.7	651.8
5°	649.5	654.2	655.3	658.8	655.3	658.8	663.4	662.2	658.8	661.1	662.2
7.5°	649.5	655.3	657.7	661.1	658.8	662.2	668.1	666.9	663.4	665.7	668.1
10°	647.2	653.0	656.5	660.0	657.7	662.2	666.9	666.9	664.6	666.9	670.4
12.5°	644.8	650.7	654.2	657.7	655.3	661.1	666.9	665.7	664.6	666.9	670.4
15°	641.3	647.2	650.7	654.2	653.0	658.8	664.6	664.6	662.2	665.7	669.2
17.5°	633.2	639.0	643.7	646.0	644.8	650.7	656.5	656.5	654.2	657.7	661.1
20°	619.3	625.1	629.7	632.0	630.9	635.5	641.3	642.5	640.2	643.7	647.2
22.5°	601.8	606.5	611.1	613.5	612.3	617.0	622.8	624.0	621.6	625.1	627.5
25°	580.9	584.4	589.1	591.4	590.3	594.9	600.6	600.6	599.5	601.8	604.1
27.5°	551.9	556.6	560.1	562.4	562.4	565.9	570.4	571.6	570.4	572.8	576.3
30°	515.9	518.2	522.8	524.0	525.2	528.7	533.3	533.3	532.2	534.5	537.9
32.5°	470.6	474.1	477.5	478.7	479.8	483.3	486.8	488.0	486.8	489.1	492.6
35°	417.1	420.6	424.1	425.2	426.4	429.9	433.4	434.6	433.4	435.7	439.2
37.5°	357.8	360.2	363.7	364.8	367.2	369.5	371.8	374.1	373.0	375.3	377.6
40°	297.4	298.6	302.1	303.2	305.6	307.9	310.2	311.4	311.4	312.6	313.7
42.5°	240.5	242.8	245.2	246.3	248.7	249.8	252.1	253.3	253.3	254.5	255.6
45°	191.7	194.1	196.4	197.6	199.8	201.0	202.1	203.3	202.1	202.1	204.5
47.5°	151.0	153.4	155.7	156.9	158.0	159.2	160.4	160.4	160.4	161.5	161.5
50°	118.5	119.7	122.0	122.0	124.3	124.3	125.5	125.5	125.5	125.5	126.7
52.5°	91.8	93.0	95.3	95.3	96.5	97.6	97.6	97.6	97.6	98.8	97.6
55°	69.7	70.9	72.1	72.1	74.4	74.4	74.4	74.4	74.4	74.4	74.4
57.5°	52.3	53.4	54.6	54.6	54.6	55.8	54.6	55.8	55.8	55.8	55.8
60°	38.4	39.5	39.5	39.5	40.7	40.7	40.7	40.7	40.7	40.7	40.7
62.5°	26.7	26.7	27.9	27.9	27.9	29.0	27.9	27.9	29.0	29.0	27.9
65°	18.6	18.6	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7
67.5°	12.8	12.8	12.8	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
70°	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
72.5°	5.8	5.8	5.8	5.8	7.0	7.0	7.0	7.0	7.0	7.0	7.0
75°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
77.5°	2.3	2.3	3.5	3.5	3.5	2.3	2.3	2.3	3.5	3.5	2.3
80°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
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



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CATALOG NUMBER: LD6A10D010TE ERW6A10935 6LW111H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	648.3	648.3	648.3	648.3
2.5°	651.8	650.7	651.8	648.3
5°	662.2	661.1	663.4	658.8
7.5°	669.2	668.1	670.4	665.7
10°	670.4	670.4	672.7	668.1
12.5°	670.4	670.4	672.7	668.1
15°	670.4	669.2	671.6	666.9
17.5°	662.2	662.2	664.6	660.0
20°	647.2	647.2	649.5	646.0
22.5°	628.6	628.6	629.7	626.3
25°	605.3	604.1	606.5	604.1
27.5°	576.3	575.1	576.3	573.9
30°	536.8	535.7	537.9	535.7
32.5°	492.6	490.3	492.6	490.3
35°	438.1	435.7	438.1	436.9
37.5°	377.6	375.3	377.6	376.5
40°	313.7	312.6	314.9	313.7
42.5°	255.6	253.3	255.6	254.5
45°	204.5	202.1	204.5	203.3
47.5°	161.5	160.4	162.7	161.5
50°	126.7	125.5	126.7	126.7
52.5°	97.6	96.5	97.6	97.6
55°	74.4	73.2	74.4	74.4
57.5°	55.8	54.6	55.8	55.8
60°	40.7	40.7	40.7	40.7
62.5°	29.0	27.9	29.0	29.0
65°	19.7	19.7	19.7	19.7
67.5°	14.0	14.0	14.0	14.0
70°	9.3	9.3	9.3	9.3
72.5°	7.0	7.0	7.0	5.8
75°	4.7	4.7	4.7	4.7
77.5°	3.5	2.3	3.5	3.5
80°	2.3	2.3	2.3	2.3
82.5°	1.2	1.2	1.2	1.2
85°	1.2	1.2	1.2	1.2
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0



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













(END OF REPORT)