

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: P136360

Luminaire Tested: **LD6A10D010TE ERW6A10827 6LW111H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136360
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 ERW6A10827 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 2700K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1075.0 lumens
Efficiency: N/A
Efficacy: 76.8 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

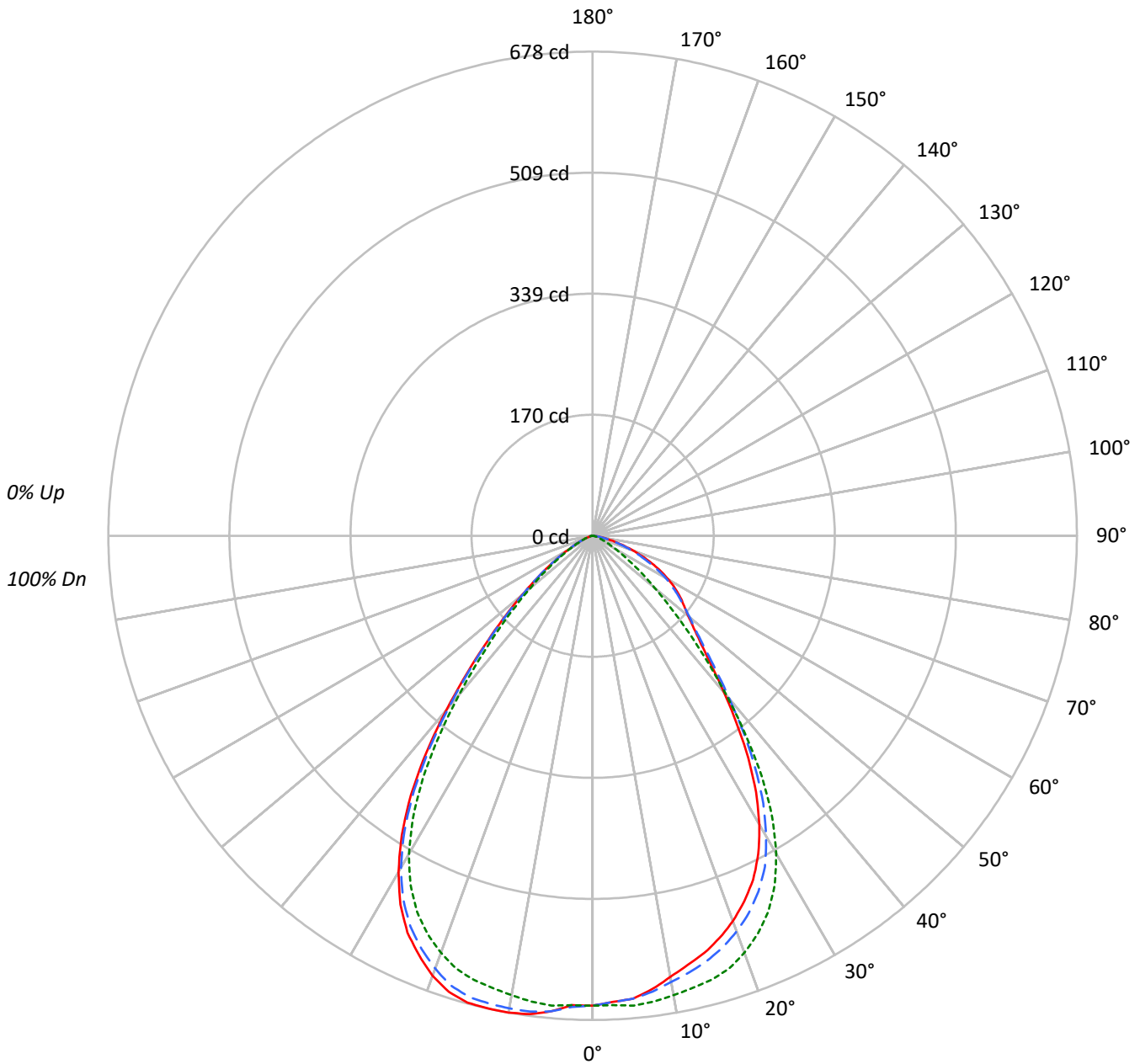
Input Watts (W): 14
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					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°	42922	42922	42922
5°	42621	43243	43780
10°	41550	43273	44909
15°	40849	43477	45712
20°	39865	43135	45510
25°	38274	41845	44134
30°	35173	38729	40944
35°	30233	32957	35306
40°	24298	24800	27108
45°	19800	17189	19034
50°	17711	11489	13042
55°	17027	7507	8588
60°	15997	4763	5389
65°	14202	2918	3087
70°	11464	1793	1793
75°	8016	1185	1185
80°	5297	902	902
85°	2620	898	898



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.6	5.8
10°-20°	180.6	16.8
20°-30°	263.0	24.5
30°-40°	255.1	23.7
40°-50°	161.2	15.0
50°-60°	89.8	8.4
60°-70°	44.5	4.1
70°-80°	15.7	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°	506.2	47.1
0°-40°	761.4	70.8
0°-60°	1012.4	94.2
0°-90°	1075.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1075.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	658	658	658	658	658	
5°	651	651	660	668	668	61
15°	605	617	644	668	677	170
25°	532	549	581	604	613	243
35°	380	397	414	436	443	235
45°	215	220	186	204	206	170
55°	150	146	66	76	76	133
65°	92	85	19	20	20	90
75°	32	30	5	5	5	35
85°	4	4	1	1	1	5
90°	0	0	0	0	0	



TEST NUMBER: P136360

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	657.9	657.9	657.9	657.9	657.9	657.9	657.9	657.9	657.9	657.9	657.9
2.5°	653.2	647.3	649.6	648.5	649.6	648.5	652.0	648.5	650.8	653.2	648.5
5°	650.8	644.9	646.1	646.1	646.1	646.1	649.6	646.1	648.5	650.8	647.3
7.5°	640.2	635.5	636.7	636.7	636.7	636.7	640.2	637.9	640.2	643.7	640.2
10°	627.2	622.5	624.9	624.9	624.9	624.9	629.6	627.2	629.6	634.3	630.8
12.5°	615.4	611.9	614.3	614.3	614.3	615.4	619.0	617.8	620.2	626.1	622.5
15°	604.8	601.3	603.7	603.7	603.7	604.8	608.4	609.6	611.9	616.6	614.3
17.5°	590.7	587.2	590.7	590.7	589.5	591.9	596.6	596.6	598.9	604.8	603.7
20°	574.2	570.6	574.2	574.2	573.0	575.4	580.1	581.3	583.6	589.5	588.3
22.5°	554.1	553.0	554.1	556.5	555.3	556.5	561.2	562.4	564.8	571.8	570.6
25°	531.7	530.6	532.9	534.1	532.9	534.1	538.8	540.0	542.3	549.4	549.4
27.5°	502.3	501.1	504.6	504.6	504.6	507.0	510.5	512.9	514.1	522.3	521.1
30°	466.9	465.7	468.1	469.3	469.3	469.3	474.0	477.5	478.7	485.8	485.8
32.5°	425.6	425.6	426.8	429.2	428.0	430.3	433.9	436.2	438.6	444.5	444.5
35°	379.6	380.8	382.0	384.4	383.2	384.4	387.9	390.3	391.4	397.3	396.2
37.5°	331.3	332.5	333.7	334.8	334.8	336.0	339.6	340.7	341.9	346.6	344.3
40°	285.3	285.3	286.5	288.9	287.7	290.0	292.4	293.6	293.6	297.1	294.8
42.5°	245.2	246.4	247.6	248.8	248.8	250.0	252.3	253.5	253.5	254.7	251.1
45°	214.6	215.8	215.8	218.1	218.1	219.3	220.5	221.7	220.5	220.5	216.9
47.5°	192.2	193.4	194.5	195.7	195.7	196.9	198.1	198.1	196.9	195.7	191.0
50°	174.5	176.9	176.9	178.0	179.2	180.4	180.4	180.4	178.0	176.9	169.8
52.5°	161.5	162.7	163.9	165.1	165.1	166.2	167.4	166.2	163.9	160.3	153.3
55°	149.7	150.9	152.1	153.3	153.3	153.3	153.3	152.1	149.7	146.2	139.1
57.5°	136.8	137.9	139.1	140.3	140.3	140.3	140.3	139.1	136.8	132.1	123.8
60°	122.6	123.8	125.0	126.2	126.2	126.2	125.0	123.8	121.4	117.9	109.6
62.5°	107.3	108.5	109.6	109.6	109.6	108.5	108.5	107.3	104.9	101.4	93.1
65°	92.0	92.0	93.1	93.1	93.1	93.1	92.0	90.8	88.4	84.9	79.0
67.5°	75.5	76.6	76.6	76.6	76.6	76.6	75.5	75.5	73.1	69.6	64.8
70°	60.1	60.1	61.3	61.3	61.3	61.3	60.1	60.1	57.8	55.4	50.7
72.5°	44.8	44.8	44.8	46.0	46.0	46.0	44.8	44.8	43.6	41.3	37.7
75°	31.8	31.8	31.8	33.0	33.0	33.0	33.0	31.8	30.7	29.5	27.1
77.5°	21.2	22.4	21.2	21.2	21.2	22.4	21.2	21.2	21.2	20.0	17.7
80°	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	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	7.1	7.1
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°	657.9	657.9	657.9	657.9	657.9	657.9	657.9	657.9	657.9	657.9	657.9
2.5°	652.0	654.4	656.7	654.4	650.8	657.9	656.7	657.9	656.7	654.4	661.4
5°	650.8	653.2	656.7	654.4	652.0	659.1	657.9	660.3	660.3	657.9	665.0
7.5°	643.7	646.1	652.0	649.6	647.3	654.4	655.5	657.9	659.1	656.7	665.0
10°	635.5	637.9	643.7	642.6	641.4	649.6	650.8	653.2	654.4	653.2	661.4
12.5°	627.2	630.8	636.7	635.5	635.5	643.7	644.9	648.5	650.8	649.6	659.1
15°	619.0	623.7	630.8	629.6	629.6	639.0	640.2	643.7	646.1	646.1	655.5
17.5°	608.4	613.1	620.2	619.0	621.3	628.4	630.8	635.5	637.9	636.7	647.3
20°	593.0	598.9	606.0	604.8	606.0	615.4	617.8	621.3	623.7	623.7	633.1
22.5°	575.4	581.3	588.3	587.2	589.5	596.6	598.9	603.7	606.0	604.8	614.3
25°	554.1	560.0	565.9	565.9	567.1	575.4	577.7	581.3	584.8	583.6	591.9
27.5°	525.8	531.7	537.6	536.5	537.6	545.9	548.2	551.8	555.3	554.1	562.4
30°	489.3	495.2	499.9	498.7	499.9	508.2	509.3	514.1	517.6	517.6	524.7
32.5°	446.8	452.7	455.1	452.7	455.1	461.0	463.4	468.1	470.4	471.6	478.7
35°	398.5	402.0	403.2	400.9	400.9	406.8	409.1	413.8	416.2	417.4	423.3
37.5°	345.5	347.8	345.5	341.9	343.1	345.5	349.0	352.5	356.1	357.2	363.1
40°	293.6	292.4	288.9	283.0	281.8	285.3	287.7	291.2	293.6	295.9	299.5
42.5°	247.6	245.2	238.2	231.1	229.9	229.9	231.1	234.6	237.0	238.2	242.9
45°	211.0	206.3	195.7	187.5	182.7	183.9	183.9	186.3	187.5	189.8	193.4
47.5°	182.7	174.5	161.5	150.9	146.2	145.0	145.0	146.2	147.4	149.7	152.1
50°	160.3	149.7	134.4	122.6	116.7	114.4	114.4	113.2	115.5	116.7	119.1
52.5°	142.7	129.7	112.0	99.0	92.0	89.6	88.4	88.4	88.4	89.6	92.0
55°	126.2	112.0	93.1	80.2	71.9	69.6	67.2	66.0	67.2	68.4	69.6
57.5°	112.0	96.7	77.8	63.7	56.6	53.1	50.7	49.5	49.5	50.7	51.9
60°	97.9	82.5	63.7	50.7	43.6	40.1	37.7	36.5	36.5	37.7	37.7
62.5°	82.5	68.4	51.9	40.1	33.0	29.5	27.1	27.1	25.9	25.9	27.1
65°	69.6	56.6	42.4	31.8	24.8	22.4	20.0	18.9	18.9	17.7	18.9
67.5°	56.6	46.0	34.2	24.8	18.9	16.5	14.1	14.1	13.0	13.0	13.0
70°	44.8	36.5	27.1	18.9	15.3	11.8	10.6	9.4	9.4	9.4	9.4
72.5°	33.0	27.1	20.0	14.1	10.6	9.4	8.3	7.1	5.9	5.9	5.9
75°	23.6	18.9	14.1	10.6	8.3	7.1	5.9	4.7	4.7	4.7	4.7
77.5°	16.5	13.0	10.6	7.1	5.9	4.7	3.5	3.5	3.5	3.5	2.4
80°	10.6	8.3	7.1	4.7	3.5	3.5	2.4	2.4	2.4	2.4	2.4
82.5°	5.9	4.7	3.5	3.5	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°	657.9	657.9	657.9	657.9	657.9	657.9	657.9	657.9	657.9	657.9	657.9
2.5°	654.4	659.1	659.1	661.4	657.9	660.3	663.8	662.6	659.1	660.3	661.4
5°	659.1	663.8	665.0	668.5	665.0	668.5	673.2	672.0	668.5	670.9	672.0
7.5°	659.1	665.0	667.3	670.9	668.5	672.0	677.9	676.8	673.2	675.6	677.9
10°	656.7	662.6	666.1	669.7	667.3	672.0	676.8	676.8	674.4	676.8	680.3
12.5°	654.4	660.3	663.8	667.3	665.0	670.9	676.8	675.6	674.4	676.8	680.3
15°	650.8	656.7	660.3	663.8	662.6	668.5	674.4	674.4	672.0	675.6	679.1
17.5°	642.6	648.5	653.2	655.5	654.4	660.3	666.1	666.1	663.8	667.3	670.9
20°	628.4	634.3	639.0	641.4	640.2	644.9	650.8	652.0	649.6	653.2	656.7
22.5°	610.7	615.4	620.2	622.5	621.3	626.1	632.0	633.1	630.8	634.3	636.7
25°	589.5	593.0	597.8	600.1	598.9	603.7	609.6	609.6	608.4	610.7	613.1
27.5°	560.0	564.8	568.3	570.6	570.6	574.2	578.9	580.1	578.9	581.3	584.8
30°	523.5	525.8	530.6	531.7	532.9	536.5	541.2	541.2	540.0	542.3	545.9
32.5°	477.5	481.0	484.6	485.8	486.9	490.5	494.0	495.2	494.0	496.4	499.9
35°	423.3	426.8	430.3	431.5	432.7	436.2	439.8	441.0	439.8	442.1	445.7
37.5°	363.1	365.5	369.0	370.2	372.6	374.9	377.3	379.6	378.5	380.8	383.2
40°	301.8	303.0	306.5	307.7	310.1	312.4	314.8	316.0	316.0	317.2	318.3
42.5°	244.1	246.4	248.8	250.0	252.3	253.5	255.8	257.0	257.0	258.2	259.4
45°	194.5	196.9	199.3	200.4	202.8	204.0	205.1	206.3	205.1	205.1	207.5
47.5°	153.3	155.6	158.0	159.2	160.3	161.5	162.7	162.7	162.7	163.9	163.9
50°	120.3	121.4	123.8	123.8	126.2	126.2	127.3	127.3	127.3	127.3	128.5
52.5°	93.1	94.3	96.7	96.7	97.9	99.0	99.0	99.0	99.0	100.2	99.0
55°	70.7	71.9	73.1	73.1	75.5	75.5	75.5	75.5	75.5	75.5	75.5
57.5°	53.1	54.2	55.4	55.4	55.4	56.6	55.4	56.6	56.6	56.6	56.6
60°	38.9	40.1	40.1	40.1	41.3	41.3	41.3	41.3	41.3	41.3	41.3
62.5°	27.1	27.1	28.3	28.3	28.3	29.5	28.3	28.3	29.5	29.5	28.3
65°	18.9	18.9	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
67.5°	13.0	13.0	13.0	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1
70°	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
72.5°	5.9	5.9	5.9	5.9	7.1	7.1	7.1	7.1	7.1	7.1	7.1
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°	2.4	2.4	3.5	3.5	3.5	2.4	2.4	2.4	3.5	3.5	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: P136360

CATALOG NUMBER: LD6A10D010TE ERW6A10827 6LW111H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	657.9	657.9	657.9	657.9
2.5°	661.4	660.3	661.4	657.9
5°	672.0	670.9	673.2	668.5
7.5°	679.1	677.9	680.3	675.6
10°	680.3	680.3	682.7	677.9
12.5°	680.3	680.3	682.7	677.9
15°	680.3	679.1	681.5	676.8
17.5°	672.0	672.0	674.4	669.7
20°	656.7	656.7	659.1	655.5
22.5°	637.9	637.9	639.0	635.5
25°	614.3	613.1	615.4	613.1
27.5°	584.8	583.6	584.8	582.4
30°	544.7	543.5	545.9	543.5
32.5°	499.9	497.5	499.9	497.5
35°	444.5	442.1	444.5	443.3
37.5°	383.2	380.8	383.2	382.0
40°	318.3	317.2	319.5	318.3
42.5°	259.4	257.0	259.4	258.2
45°	207.5	205.1	207.5	206.3
47.5°	163.9	162.7	165.1	163.9
50°	128.5	127.3	128.5	128.5
52.5°	99.0	97.9	99.0	99.0
55°	75.5	74.3	75.5	75.5
57.5°	56.6	55.4	56.6	56.6
60°	41.3	41.3	41.3	41.3
62.5°	29.5	28.3	29.5	29.5
65°	20.0	20.0	20.0	20.0
67.5°	14.1	14.1	14.1	14.1
70°	9.4	9.4	9.4	9.4
72.5°	7.1	7.1	7.1	5.9
75°	4.7	4.7	4.7	4.7
77.5°	3.5	2.4	3.5	3.5
80°	2.4	2.4	2.4	2.4
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)