

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: P252679

Luminaire Tested: **LD6B20D010 EU6B10209024 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252679
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-9)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B20D010 EU6B10209024 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1375.0 lumens
Efficiency: N/A
Efficacy: 66.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

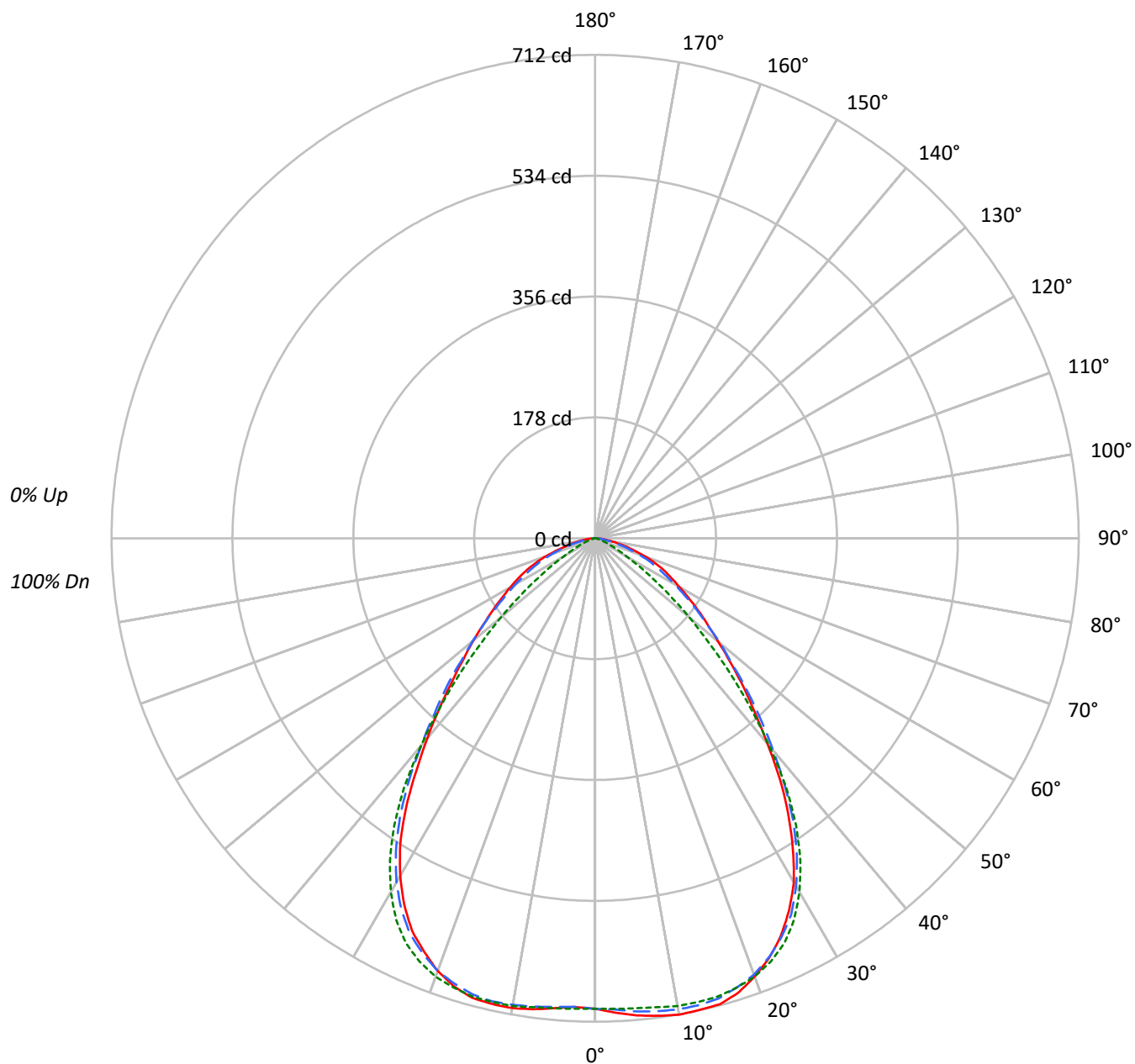
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10		50	30	10			50	30	10			50
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	111	107	104	101	109	105	102	99		101	98	96			97	95	93			94
2	103	96	91	86	101	95	89	85		91	87	83			88	84	81			85
3	95	87	80	75	93	85	79	74		82	77	73			80	75	71			77
4	89	78	71	65	87	77	70	65		75	69	64			73	67	63			71
5	82	71	64	58	80	70	63	58		68	62	57			66	61	56			65
6	77	65	57	52	75	64	57	51		63	56	51			61	55	51			59
7	72	60	52	47	70	59	52	46		58	51	46			56	50	46			55
8	67	55	47	42	66	54	47	42		53	47	42			52	46	42			51
9	63	51	43	38	62	50	43	38		49	43	38			48	42	38			47
10	59	47	40	35	58	47	40	35		46	39	35			45	39	35			44

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	45199	45199	45199
5°	46203	45496	45496
10°	47194	46346	46545
15°	47982	47185	47320
20°	47690	47690	47079
25°	46553	47402	45919
30°	44070	45321	43256
35°	39488	41049	38707
40°	33547	33964	32712
45°	28390	25945	27393
50°	23963	18300	23669
55°	21065	11818	20838
60°	18672	7033	18789
65°	17243	4230	17243
70°	14955	2423	14573
75°	11847	1487	11116
80°	8829	1090	8453
85°	8084	749	7336



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.7	4.9
10°-20°	197.4	14.4
20°-30°	296.9	21.6
30°-40°	312.1	22.7
40°-50°	233.2	17.0
50°-60°	145.2	10.6
60°-70°	82.6	6.0
70°-80°	34.0	2.5
80°-90°	7.0	0.5
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°	561.0	40.8
0°-40°	873.1	63.5
0°-60°	1251.4	91.0
0°-90°	1375.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1375.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	693	693	693	693	693	
5°	706	700	695	693	695	68
15°	710	702	699	696	701	200
25°	647	649	658	644	638	296
35°	496	508	515	501	486	308
45°	308	314	281	309	297	238
55°	185	181	104	178	183	167
65°	112	100	27	100	112	110
75°	47	37	6	36	44	51
85°	11	7	1	6	10	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	692.8	692.8	692.8	692.8	692.8	692.8	692.8	692.8	692.8	692.8	692.8
2.5°	699.6	698.6	699.6	697.7	696.7	696.7	697.7	695.7	694.7	695.7	694.7
5°	705.5	703.5	704.5	703.5	701.6	701.6	702.6	699.6	699.6	700.6	699.6
7.5°	709.4	709.4	709.4	707.5	706.5	705.5	707.5	704.5	703.5	703.5	702.6
10°	712.4	711.4	712.4	710.4	708.4	707.5	709.4	707.5	705.5	707.5	704.5
12.5°	711.4	711.4	711.4	710.4	708.4	707.5	709.4	706.5	705.5	706.5	704.5
15°	710.4	707.5	708.4	707.5	704.5	704.5	705.5	702.6	700.6	703.5	701.6
17.5°	701.6	699.6	700.6	698.6	696.7	695.7	696.7	695.7	693.7	695.7	693.7
20°	686.9	686.9	687.9	685.9	683.9	683.0	684.9	683.0	681.0	683.9	683.9
22.5°	669.2	669.2	669.2	668.3	667.3	667.3	667.3	666.3	665.3	667.3	668.3
25°	646.7	645.7	646.7	647.7	646.7	645.7	646.7	646.7	644.7	648.7	648.7
27.5°	618.3	618.3	620.2	619.3	619.3	618.3	620.2	620.2	619.3	622.2	625.1
30°	585.0	583.0	585.0	585.0	586.0	586.0	586.9	586.9	586.9	589.9	591.8
32.5°	541.9	542.8	545.8	544.8	543.8	546.8	546.8	548.7	549.7	551.7	552.6
35°	495.8	496.8	496.8	497.8	499.7	497.8	502.7	501.7	502.7	506.6	508.5
37.5°	446.8	443.9	448.8	446.8	447.8	447.8	449.8	450.7	453.7	458.6	458.6
40°	393.9	394.9	396.8	397.8	398.8	398.8	398.8	401.7	402.7	408.6	407.6
42.5°	347.8	347.8	349.8	350.8	350.8	350.8	350.8	353.7	355.7	357.6	359.6
45°	307.7	304.7	306.7	306.7	308.7	307.7	309.6	311.6	312.6	315.5	314.5
47.5°	269.5	268.5	269.5	270.4	269.5	270.4	271.4	272.4	273.4	273.4	273.4
50°	236.1	236.1	237.1	238.1	238.1	238.1	238.1	239.1	239.1	241.0	239.1
52.5°	208.7	209.7	209.7	208.7	209.7	209.7	210.7	210.7	209.7	209.7	206.7
55°	185.2	184.2	185.2	184.2	185.2	185.2	184.2	184.2	183.2	182.3	181.3
57.5°	162.7	162.7	162.7	162.7	161.7	162.7	161.7	160.7	160.7	158.7	155.8
60°	143.1	143.1	143.1	143.1	143.1	142.1	143.1	142.1	140.1	138.2	134.2
62.5°	126.4	125.4	126.4	125.4	125.4	124.4	124.4	123.5	121.5	119.5	115.6
65°	111.7	112.7	111.7	111.7	110.7	109.7	109.7	108.8	105.8	103.9	99.9
67.5°	96.0	95.0	95.0	95.0	94.1	94.1	94.1	92.1	90.1	87.2	83.3
70°	78.4	78.4	78.4	77.4	77.4	76.4	76.4	75.4	73.5	71.5	66.6
72.5°	61.7	61.7	61.7	59.8	60.8	59.8	59.8	57.8	56.8	53.9	51.0
75°	47.0	47.0	46.1	46.1	45.1	44.1	44.1	43.1	42.1	40.2	37.2
77.5°	34.3	34.3	34.3	33.3	32.3	31.4	31.4	30.4	29.4	28.4	26.5
80°	23.5	23.5	23.5	23.5	22.5	21.6	21.6	20.6	20.6	19.6	17.6
82.5°	15.7	15.7	15.7	15.7	14.7	14.7	14.7	13.7	12.7	12.7	10.8
85°	10.8	10.8	9.8	9.8	9.8	9.8	8.8	8.8	7.8	6.9	6.9
87.5°	5.9	5.9	5.9	5.9	4.9	4.9	4.9	4.9	3.9	3.9	2.9
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	692.8	692.8	692.8	692.8	692.8	692.8	692.8	692.8	692.8	692.8	692.8
2.5°	697.7	697.7	696.7	693.7	694.7	693.7	694.7	693.7	690.8	693.7	690.8
5°	701.6	702.6	700.6	696.7	697.7	696.7	696.7	695.7	692.8	694.7	692.8
7.5°	705.5	704.5	703.5	699.6	700.6	699.6	699.6	697.7	694.7	696.7	693.7
10°	707.5	707.5	705.5	701.6	701.6	700.6	701.6	700.6	696.7	699.6	697.7
12.5°	707.5	706.5	706.5	701.6	702.6	701.6	702.6	700.6	697.7	699.6	698.6
15°	704.5	704.5	703.5	698.6	699.6	699.6	700.6	698.6	695.7	698.6	696.7
17.5°	698.6	698.6	697.7	693.7	695.7	695.7	696.7	694.7	691.8	693.7	693.7
20°	686.9	687.9	687.9	684.9	686.9	686.9	687.9	686.9	685.9	686.9	684.9
22.5°	673.2	675.1	675.1	672.2	674.1	674.1	677.1	676.1	674.1	675.1	674.1
25°	652.6	654.5	656.5	654.5	656.5	656.5	659.4	658.5	656.5	658.5	655.5
27.5°	629.1	630.0	632.0	630.0	633.0	632.0	634.9	634.0	631.0	634.0	633.0
30°	595.7	599.7	602.6	599.7	602.6	602.6	604.6	603.6	602.6	601.6	601.6
32.5°	558.5	562.4	562.4	561.5	563.4	563.4	564.4	562.4	561.5	562.4	563.4
35°	512.5	514.4	516.4	515.4	516.4	517.4	516.4	517.4	514.4	515.4	515.4
37.5°	462.5	464.4	464.4	461.5	463.5	463.5	461.5	461.5	459.5	461.5	457.6
40°	409.6	407.6	408.6	406.6	404.7	404.7	403.7	399.8	397.8	398.8	399.8
42.5°	357.6	357.6	354.7	349.8	344.9	344.9	342.0	340.0	336.1	338.0	337.1
45°	313.6	308.7	304.7	296.9	294.0	292.0	287.1	282.2	280.2	281.2	280.2
47.5°	271.4	267.5	257.7	246.9	244.0	241.0	235.2	229.3	227.3	225.4	225.4
50°	236.1	229.3	218.5	206.7	201.8	196.9	189.1	183.2	179.3	180.3	180.3
52.5°	203.8	196.0	183.2	168.5	162.7	156.8	149.9	143.1	140.1	139.1	139.1
55°	175.4	166.6	153.8	137.2	132.3	125.4	116.6	108.8	104.8	103.9	105.8
57.5°	149.9	142.1	127.4	110.7	104.8	98.0	89.2	82.3	77.4	76.4	77.4
60°	129.3	118.6	105.8	90.1	82.3	76.4	66.6	60.8	55.9	53.9	54.9
62.5°	108.8	99.0	86.2	70.5	64.7	58.8	50.0	43.1	39.2	38.2	39.2
65°	93.1	83.3	71.5	57.8	51.9	46.1	38.2	31.4	28.4	27.4	28.4
67.5°	77.4	68.6	58.8	46.1	41.2	36.3	28.4	23.5	19.6	18.6	19.6
70°	62.7	54.9	45.1	36.3	31.4	27.4	21.6	16.7	13.7	12.7	13.7
72.5°	47.0	41.2	34.3	26.5	23.5	20.6	15.7	11.8	9.8	8.8	9.8
75°	34.3	29.4	24.5	18.6	16.7	14.7	10.8	7.8	6.9	5.9	6.9
77.5°	23.5	20.6	16.7	12.7	10.8	9.8	6.9	5.9	4.9	3.9	3.9
80°	15.7	13.7	10.8	8.8	7.8	6.9	4.9	3.9	2.9	2.9	2.9
82.5°	9.8	7.8	6.9	4.9	3.9	3.9	2.9	2.0	2.0	2.0	2.0
85°	5.9	4.9	3.9	2.9	2.0	2.0	1.0	1.0	1.0	1.0	1.0
87.5°	2.9	2.0	2.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	1.0
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	692.8	692.8	692.8	692.8	692.8	692.8	692.8	692.8	692.8	692.8	692.8
2.5°	692.8	690.8	690.8	691.8	692.8	693.7	691.8	690.8	690.8	693.7	691.8
5°	692.8	691.8	691.8	691.8	693.7	694.7	692.8	691.8	692.8	695.7	694.7
7.5°	695.7	693.7	694.7	694.7	695.7	697.7	695.7	694.7	695.7	698.6	696.7
10°	697.7	695.7	696.7	695.7	698.6	699.6	697.7	696.7	697.7	701.6	700.6
12.5°	698.6	697.7	697.7	696.7	699.6	700.6	698.6	697.7	698.6	701.6	700.6
15°	696.7	695.7	695.7	695.7	697.7	699.6	696.7	695.7	695.7	698.6	697.7
17.5°	692.8	690.8	690.8	690.8	691.8	692.8	689.8	688.8	687.9	690.8	689.8
20°	685.9	683.9	682.0	682.0	683.0	683.0	681.0	678.1	678.1	679.0	677.1
22.5°	673.2	672.2	670.2	669.2	671.2	670.2	666.3	663.4	662.4	663.4	661.4
25°	655.5	653.6	652.6	651.6	652.6	651.6	647.7	643.8	643.8	643.8	640.8
27.5°	631.0	629.1	628.1	628.1	629.1	627.1	623.2	619.3	617.3	617.3	614.4
30°	599.7	599.7	598.7	597.7	596.7	596.7	590.8	586.9	585.0	586.0	584.0
32.5°	561.5	560.5	559.5	556.6	557.5	556.6	551.7	548.7	545.8	543.8	542.8
35°	512.5	512.5	511.5	511.5	511.5	510.5	505.6	502.7	500.7	499.7	496.8
37.5°	458.6	457.6	456.6	456.6	456.6	456.6	453.7	450.7	450.7	449.8	447.8
40°	397.8	398.8	399.8	398.8	401.7	404.7	400.8	398.8	397.8	400.8	396.8
42.5°	339.0	338.0	342.9	343.9	343.9	348.8	349.8	350.8	349.8	351.8	351.8
45°	282.2	281.2	286.1	288.1	293.0	298.9	301.8	306.7	308.7	310.6	308.7
47.5°	228.3	232.2	236.1	241.0	245.0	254.8	260.6	265.5	267.5	270.4	270.4
50°	183.2	187.2	194.0	197.9	202.8	214.6	224.4	231.2	235.2	238.1	237.1
52.5°	141.1	148.0	156.8	160.7	167.6	181.3	192.1	199.9	204.8	207.7	208.7
55°	108.8	114.6	123.5	129.3	136.2	150.9	164.6	173.4	178.3	182.3	184.2
57.5°	80.3	87.2	97.0	101.9	109.7	126.4	138.2	148.9	154.8	159.7	160.7
60°	58.8	65.6	74.5	80.3	88.2	104.8	118.6	128.4	135.2	139.1	141.1
62.5°	42.1	49.0	57.8	63.7	70.5	85.2	99.0	108.8	115.6	120.5	123.5
65°	30.4	37.2	46.1	51.0	56.8	70.5	83.3	93.1	99.9	105.8	107.8
67.5°	22.5	27.4	35.3	40.2	46.1	56.8	67.6	76.4	83.3	88.2	90.1
70°	16.7	20.6	27.4	30.4	34.3	44.1	52.9	60.8	66.6	70.5	72.5
72.5°	11.8	14.7	19.6	22.5	25.5	33.3	40.2	46.1	50.0	53.9	55.9
75°	7.8	9.8	13.7	15.7	17.6	23.5	28.4	33.3	36.3	39.2	40.2
77.5°	4.9	6.9	9.8	10.8	12.7	15.7	19.6	22.5	24.5	26.5	28.4
80°	2.9	3.9	5.9	6.9	7.8	10.8	12.7	14.7	16.7	18.6	19.6
82.5°	2.0	2.9	3.9	3.9	4.9	5.9	7.8	9.8	10.8	11.8	12.7
85°	1.0	1.0	2.0	2.0	2.9	2.9	3.9	4.9	5.9	6.9	7.8
87.5°	1.0	1.0	1.0	1.0	2.0	2.0	2.9	2.9	2.9	3.9	3.9
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):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	692.8	692.8	692.8	692.8	692.8	692.8	692.8	692.8
2.5°	689.8	692.8	689.8	691.8	690.8	690.8	689.8	690.8
5°	692.8	696.7	692.8	695.7	693.7	693.7	693.7	694.7
7.5°	695.7	699.6	696.7	699.6	698.6	697.7	697.7	699.6
10°	698.6	701.6	699.6	702.6	701.6	700.6	700.6	702.6
12.5°	698.6	702.6	700.6	703.5	702.6	701.6	701.6	702.6
15°	695.7	700.6	697.7	700.6	699.6	698.6	698.6	700.6
17.5°	686.9	690.8	688.8	690.8	690.8	689.8	690.8	691.8
20°	675.1	678.1	676.1	678.1	678.1	676.1	677.1	678.1
22.5°	658.5	661.4	659.4	661.4	660.4	659.4	659.4	658.5
25°	637.9	641.8	638.9	640.8	638.9	636.9	636.9	637.9
27.5°	612.4	615.3	611.4	613.4	611.4	609.5	609.5	608.5
30°	579.1	580.1	577.1	579.1	577.1	576.2	574.2	574.2
32.5°	538.9	539.9	537.0	537.0	535.0	535.0	531.1	534.0
35°	491.9	492.9	491.9	490.9	488.0	487.0	486.0	486.0
37.5°	442.9	442.9	440.0	439.0	437.0	435.1	436.0	433.1
40°	392.9	391.9	389.0	390.0	389.0	386.1	385.1	384.1
42.5°	345.9	345.9	342.9	343.9	342.0	341.0	338.0	339.0
45°	304.7	304.7	301.8	301.8	300.8	297.9	298.9	296.9
47.5°	267.5	267.5	266.5	266.5	263.6	262.6	262.6	262.6
50°	235.2	235.2	235.2	235.2	234.2	233.2	232.2	233.2
52.5°	207.7	209.7	208.7	208.7	207.7	206.7	205.8	205.8
55°	183.2	184.2	184.2	185.2	184.2	183.2	184.2	183.2
57.5°	161.7	163.6	163.6	163.6	163.6	163.6	162.7	161.7
60°	143.1	144.0	144.0	145.0	145.0	145.0	144.0	144.0
62.5°	124.4	126.4	127.4	127.4	128.4	127.4	127.4	127.4
65°	109.7	111.7	112.7	111.7	112.7	112.7	111.7	111.7
67.5°	92.1	94.1	94.1	94.1	94.1	95.0	94.1	94.1
70°	74.5	76.4	75.4	76.4	76.4	76.4	76.4	76.4
72.5°	56.8	57.8	58.8	58.8	59.8	58.8	58.8	58.8
75°	41.2	43.1	43.1	43.1	43.1	44.1	44.1	44.1
77.5°	29.4	30.4	30.4	31.4	31.4	31.4	31.4	32.3
80°	20.6	20.6	21.6	21.6	22.5	22.5	22.5	22.5
82.5°	13.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7
85°	7.8	8.8	8.8	8.8	8.8	9.8	9.8	9.8
87.5°	4.9	4.9	4.9	4.9	4.9	4.9	3.9	3.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - 90°-270°













(END OF REPORT)