

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: P252581

Luminaire Tested: **LD6B20D010 EU6B10209727 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252581
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-8)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B20D010 EU6B10209727 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 97CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1451.0 lumens
Efficiency: N/A
Efficacy: 69.8 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.22 / 1.15
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

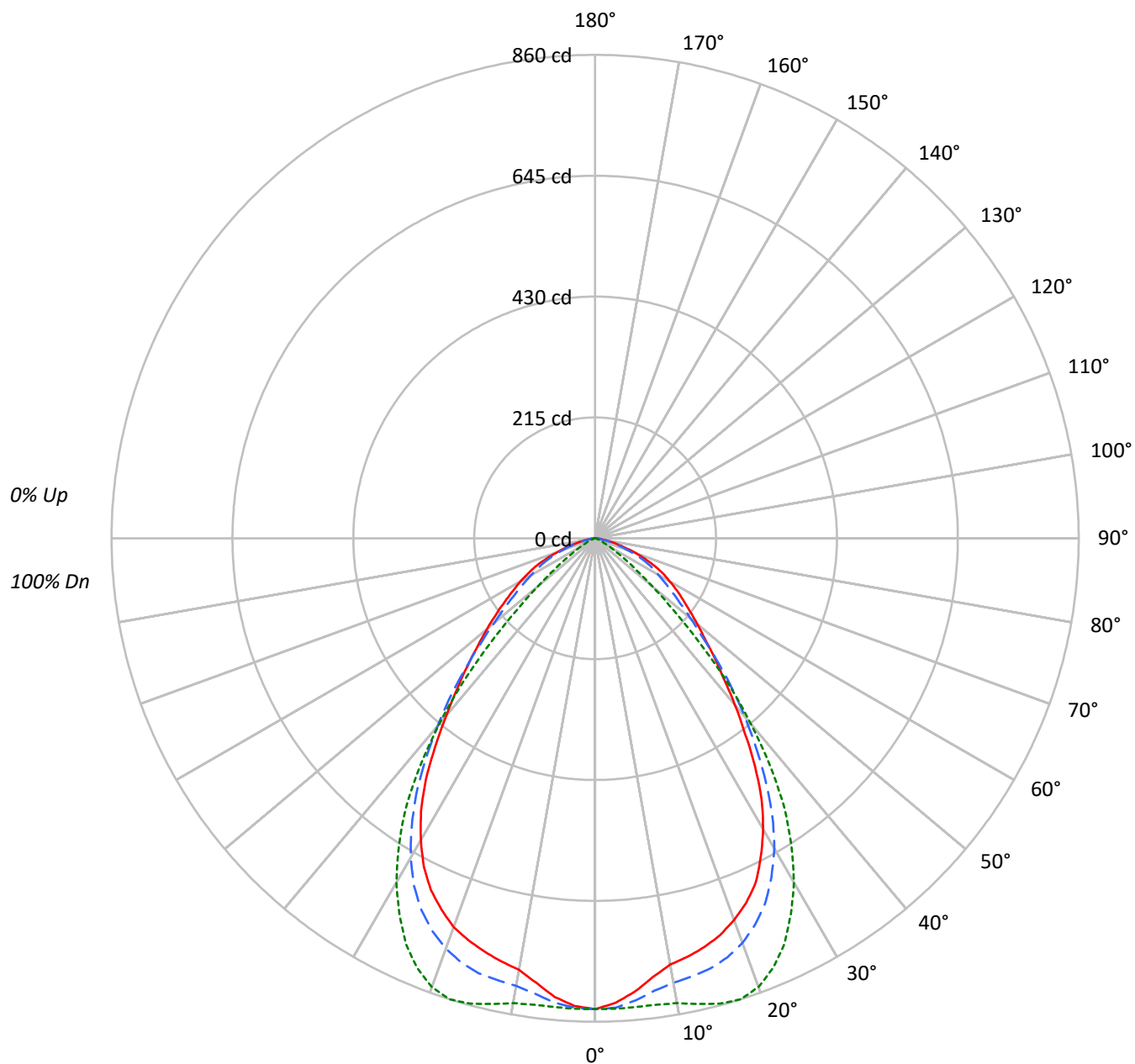
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	111	108	105	102	109	106	103	100		102	99	97		98	96	94		94	93	91
2	104	97	92	87	101	95	91	86		92	88	84		89	86	83		86	83	81
3	96	88	81	76	94	86	80	76		84	79	74		81	77	73		79	75	72
4	90	80	73	67	88	79	72	67		76	70	66		74	69	65		72	68	64
5	84	73	65	60	82	72	65	59		70	64	59		68	63	58		66	62	58
6	78	67	59	54	76	66	59	53		64	58	53		63	57	53		61	56	52
7	73	61	54	49	72	61	53	48		59	53	48		58	52	48		57	51	48
8	69	57	49	44	67	56	49	44		55	48	44		54	48	44		53	47	43
9	64	53	45	40	63	52	45	40		51	45	40		50	44	40		49	44	40
10	61	49	42	37	60	48	42	37		48	41	37		47	41	37		46	41	37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	54652	54652	54652
5°	53021	54802	53656
10°	51004	55628	51646
15°	50825	57890	51413
20°	50161	58972	51099
25°	48662	57307	49706
30°	45019	53261	46692
35°	39496	46823	41805
40°	32908	36706	35054
45°	27698	24219	29580
50°	23984	13266	25455
55°	21702	7052	22248
60°	19964	3667	19964
65°	18092	1945	17645
70°	14592	1106	13486
75°	10007	731	9276
80°	6537	376	5823
85°	4342	749	3593



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.1	5.4
10°-20°	225.9	15.6
20°-30°	333.7	23.0
30°-40°	337.1	23.2
40°-50°	232.4	16.0
50°-60°	133.5	9.2
60°-70°	77.7	5.4
70°-80°	28.3	2.0
80°-90°	4.3	0.3
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°	637.8	44.0
0°-40°	974.9	67.2
0°-60°	1340.7	92.4
0°-90°	1451.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1451.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	838	838	838	838	838	
5°	810	825	837	829	819	76
15°	752	792	857	801	761	212
25°	676	716	796	730	690	308
35°	496	530	588	554	525	308
45°	300	304	262	324	321	233
55°	191	168	62	174	196	172
65°	117	99	13	98	114	115
75°	40	32	3	31	37	45
85°	6	3	1	4	5	7
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°	837.7	837.7	837.7	837.7	837.7	837.7	837.7	837.7	837.7	837.7	837.7
2.5°	827.1	828.0	829.0	828.0	829.0	832.9	830.0	831.9	831.9	832.9	835.8
5°	809.6	809.6	811.6	810.6	813.5	817.4	814.5	817.4	818.4	820.3	825.1
7.5°	787.4	787.4	788.3	788.3	792.2	796.1	794.2	798.0	801.9	805.8	811.6
10°	769.9	771.9	771.9	772.8	776.7	781.6	780.6	785.4	789.3	795.1	802.9
12.5°	762.2	763.2	763.2	765.1	769.0	773.8	772.8	777.7	783.5	790.3	798.0
15°	752.5	754.4	753.5	755.4	759.3	764.1	763.2	768.0	774.8	781.6	792.2
17.5°	739.9	740.9	741.9	741.9	745.7	749.6	749.6	754.4	762.2	769.9	781.6
20°	722.5	724.4	724.4	725.4	728.3	734.1	733.1	738.0	745.7	753.5	766.1
22.5°	702.1	703.1	703.1	704.1	708.9	711.8	712.8	716.7	723.5	732.2	743.8
25°	676.0	677.0	676.0	678.9	680.8	686.7	684.7	689.6	697.3	704.1	715.7
27.5°	638.2	640.2	640.2	641.1	646.0	650.8	650.8	655.7	662.4	667.3	678.9
30°	597.6	600.5	597.6	602.4	604.3	608.2	611.1	614.0	619.8	626.6	637.3
32.5°	551.1	550.1	551.1	553.0	558.8	561.7	563.7	566.6	572.4	578.2	586.9
35°	495.9	497.8	498.8	502.6	502.6	507.5	508.5	510.4	519.1	523.0	529.8
37.5°	437.8	439.7	440.7	442.6	446.5	448.4	451.3	454.2	460.0	466.8	470.7
40°	386.4	386.4	387.4	389.3	392.2	393.2	396.1	400.0	403.9	409.7	413.5
42.5°	338.0	339.0	338.0	339.9	342.8	346.7	345.7	350.6	351.6	355.4	358.3
45°	300.2	300.2	298.3	300.2	300.2	304.1	303.1	305.1	304.1	306.0	304.1
47.5°	264.4	265.4	264.4	265.4	265.4	265.4	266.3	264.4	265.4	262.5	256.6
50°	236.3	237.3	235.3	236.3	235.3	234.4	235.3	232.4	231.5	227.6	221.8
52.5°	212.1	211.1	210.2	210.2	210.2	209.2	208.2	205.3	202.4	198.5	191.8
55°	190.8	189.8	188.9	188.9	186.9	185.9	185.9	183.0	180.1	175.3	167.5
57.5°	171.4	170.5	169.5	169.5	168.5	166.6	166.6	163.7	159.8	154.0	147.2
60°	153.0	153.0	153.0	152.1	152.1	150.1	150.1	147.2	143.3	137.5	129.8
62.5°	136.6	135.6	135.6	135.6	135.6	134.6	133.7	131.7	127.8	122.0	115.2
65°	117.2	117.2	117.2	117.2	116.2	116.2	116.2	113.3	111.4	105.6	98.8
67.5°	95.9	95.9	95.9	95.9	94.9	95.9	95.9	93.9	92.0	86.2	80.4
70°	76.5	75.5	74.6	75.5	74.6	74.6	75.5	73.6	72.6	67.8	62.0
72.5°	56.2	57.1	56.2	56.2	56.2	55.2	56.2	55.2	53.3	49.4	45.5
75°	39.7	40.7	40.7	39.7	39.7	39.7	38.7	38.7	36.8	33.9	32.0
77.5°	27.1	27.1	27.1	27.1	26.1	26.1	26.1	25.2	24.2	22.3	20.3
80°	17.4	17.4	17.4	17.4	16.5	16.5	16.5	15.5	15.5	13.6	11.6
82.5°	10.7	10.7	10.7	10.7	10.7	10.7	9.7	9.7	8.7	7.7	6.8
85°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	4.8	4.8	3.9	2.9
87.5°	1.9	1.9	2.9	2.9	2.9	2.9	2.9	2.9	1.9	1.9	1.9
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°	837.7	837.7	837.7	837.7	837.7	837.7	837.7	837.7	837.7	837.7	837.7
2.5°	833.9	834.8	834.8	834.8	837.7	838.7	835.8	832.9	838.7	837.7	839.7
5°	824.2	827.1	829.0	830.0	832.9	834.8	831.9	831.0	835.8	836.8	837.7
7.5°	812.6	817.4	822.2	824.2	828.0	830.0	829.0	829.0	834.8	836.8	836.8
10°	804.8	811.6	817.4	822.2	827.1	830.0	830.0	831.0	837.7	839.7	841.6
12.5°	802.9	811.6	819.3	826.1	830.0	834.8	835.8	838.7	845.5	848.4	848.4
15°	798.0	809.6	819.3	828.0	833.9	839.7	841.6	847.4	855.2	857.1	859.0
17.5°	789.3	800.9	812.6	823.2	831.0	835.8	841.6	847.4	857.1	860.0	861.0
20°	773.8	787.4	799.0	809.6	817.4	824.2	830.0	836.8	845.5	849.4	850.3
22.5°	750.6	764.1	775.8	787.4	795.1	800.9	806.7	814.5	823.2	827.1	827.1
25°	722.5	735.1	747.7	756.4	764.1	770.9	773.8	782.5	791.2	796.1	796.1
27.5°	686.7	698.3	709.9	719.6	724.4	730.2	735.1	742.8	749.6	753.5	757.4
30°	641.1	652.8	663.4	673.1	678.9	684.7	689.6	695.4	702.1	707.0	708.0
32.5°	591.7	601.4	612.1	621.8	627.6	629.5	634.4	640.2	646.0	649.8	650.8
35°	537.5	544.3	551.1	559.8	565.6	565.6	570.4	574.3	579.2	587.9	585.9
37.5°	473.6	483.3	488.1	491.0	494.9	498.8	499.7	504.6	510.4	512.3	515.2
40°	413.5	416.4	419.4	419.4	423.2	423.2	423.2	424.2	430.0	431.0	434.8
42.5°	353.5	353.5	350.6	347.7	348.7	347.7	342.8	342.8	345.7	349.6	349.6
45°	297.3	290.5	281.8	275.0	270.2	268.3	262.5	262.5	261.5	262.5	266.3
47.5°	249.9	238.2	223.7	210.2	205.3	201.4	192.7	188.9	186.9	187.9	189.8
50°	210.2	197.6	181.1	164.6	155.9	151.1	140.4	133.7	132.7	130.7	134.6
52.5°	181.1	165.6	148.2	128.8	120.1	112.3	100.7	94.9	91.0	91.0	92.0
55°	155.9	139.5	120.1	100.7	92.0	86.2	74.6	66.8	63.0	62.0	64.9
57.5°	134.6	119.1	99.8	80.4	71.7	64.9	53.3	46.5	43.6	41.6	42.6
60°	118.2	102.7	83.3	64.9	57.1	49.4	39.7	32.0	28.1	28.1	29.1
62.5°	102.7	88.1	70.7	53.3	46.5	39.7	29.1	22.3	19.4	18.4	19.4
65°	87.2	73.6	59.1	44.6	37.8	32.0	23.2	17.4	13.6	12.6	13.6
67.5°	70.7	60.0	47.5	35.8	30.0	25.2	17.4	12.6	9.7	8.7	9.7
70°	55.2	45.5	35.8	26.1	22.3	18.4	12.6	9.7	6.8	5.8	6.8
72.5°	39.7	32.9	25.2	18.4	15.5	12.6	8.7	6.8	4.8	3.9	4.8
75°	27.1	22.3	16.5	11.6	9.7	8.7	5.8	3.9	2.9	2.9	2.9
77.5°	17.4	13.6	10.7	7.7	5.8	4.8	2.9	1.9	1.9	1.9	1.9
80°	9.7	7.7	5.8	3.9	2.9	2.9	1.9	1.9	1.0	1.0	1.0
82.5°	5.8	3.9	2.9	1.9	1.9	1.0	1.0	1.0	1.0	1.0	1.0
85°	2.9	1.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
87.5°	1.0	1.0	1.0	1.0	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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	837.7	837.7	837.7	837.7	837.7	837.7	837.7	837.7	837.7	837.7	837.7
2.5°	835.8	836.8	833.9	837.7	834.8	838.7	838.7	834.8	835.8	833.9	837.7
5°	833.9	833.9	831.9	834.8	831.0	834.8	833.9	827.1	829.0	825.1	829.0
7.5°	833.9	831.9	829.0	831.9	827.1	830.0	826.1	819.3	817.4	812.6	812.6
10°	836.8	833.9	830.0	831.0	826.1	827.1	821.3	811.6	808.7	802.9	800.9
12.5°	843.5	840.6	834.8	836.8	830.0	830.0	822.2	810.6	804.8	797.1	795.1
15°	853.2	848.4	841.6	842.6	835.8	831.9	822.2	808.7	800.9	790.3	787.4
17.5°	855.2	850.3	841.6	841.6	832.9	828.0	816.4	800.9	791.2	780.6	774.8
20°	844.5	839.7	830.0	829.0	821.3	814.5	801.9	786.4	776.7	765.1	760.3
22.5°	822.2	816.4	807.7	806.7	799.0	795.1	781.6	766.1	756.4	744.8	740.9
25°	789.3	786.4	777.7	776.7	769.9	765.1	753.5	738.9	730.2	718.6	714.7
27.5°	750.6	747.7	738.9	738.9	731.2	728.3	717.6	704.1	697.3	686.7	681.8
30°	704.1	700.2	695.4	694.4	687.6	684.7	675.0	662.4	655.7	646.9	645.0
32.5°	648.9	646.0	643.1	642.1	635.3	632.4	625.6	613.0	607.2	599.5	596.6
35°	585.0	583.0	580.1	579.2	576.2	573.3	566.6	556.9	554.0	548.2	545.3
37.5°	511.4	513.3	511.4	511.4	508.5	509.4	503.6	497.8	494.9	491.0	489.1
40°	431.9	435.8	438.7	438.7	437.8	441.6	440.7	435.8	434.8	432.9	431.9
42.5°	351.6	353.5	359.3	363.2	362.2	371.9	372.9	376.7	379.6	377.7	378.7
45°	267.3	273.1	280.9	284.7	289.6	302.2	308.9	316.7	323.5	327.3	326.4
47.5°	192.7	199.5	208.2	214.0	222.8	238.2	255.7	265.4	275.0	279.9	284.7
50°	139.5	146.2	156.9	165.6	171.4	192.7	211.1	223.7	234.4	241.2	246.0
52.5°	97.8	105.6	117.2	124.9	133.7	154.0	175.3	189.8	201.4	210.2	215.0
55°	67.8	76.5	87.2	94.9	104.6	125.9	146.2	161.7	174.3	182.1	187.9
57.5°	47.5	55.2	65.9	72.6	82.3	102.7	123.0	138.5	151.1	158.8	165.6
60°	32.0	39.7	50.4	57.1	64.9	85.2	103.6	120.1	131.7	139.5	146.2
62.5°	22.3	29.1	39.7	46.5	53.3	70.7	88.1	102.7	114.3	123.0	128.8
65°	17.4	23.2	32.0	37.8	44.6	59.1	73.6	86.2	97.8	106.5	110.4
67.5°	12.6	18.4	25.2	30.0	34.9	47.5	60.0	69.7	80.4	87.2	92.0
70°	8.7	12.6	18.4	22.3	26.1	35.8	45.5	54.2	62.0	66.8	70.7
72.5°	6.8	8.7	12.6	15.5	18.4	25.2	32.9	39.7	45.5	49.4	53.3
75°	3.9	5.8	8.7	10.7	12.6	17.4	22.3	27.1	31.0	33.9	35.8
77.5°	1.9	2.9	4.8	5.8	7.7	10.7	14.5	17.4	20.3	22.3	24.2
80°	1.9	1.9	2.9	2.9	3.9	5.8	7.7	9.7	11.6	13.6	14.5
82.5°	1.0	1.0	1.9	1.9	1.9	2.9	3.9	5.8	6.8	7.7	8.7
85°	1.0	1.0	1.0	1.0	1.0	1.9	1.9	2.9	3.9	4.8	4.8
87.5°	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.9	1.9	1.9	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):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	837.7	837.7	837.7	837.7	837.7	837.7	837.7	837.7
2.5°	834.8	836.8	835.8	837.7	834.8	833.9	835.8	832.9
5°	824.2	825.1	824.2	824.2	822.2	820.3	822.2	819.3
7.5°	807.7	807.7	804.8	804.8	800.9	799.0	799.0	798.0
10°	794.2	791.2	788.3	789.3	783.5	781.6	780.6	779.6
12.5°	787.4	785.4	780.6	780.6	774.8	772.8	771.9	770.9
15°	779.6	775.8	771.9	770.9	766.1	764.1	763.2	761.2
17.5°	766.1	763.2	758.3	758.3	753.5	752.5	750.6	749.6
20°	751.5	747.7	743.8	743.8	738.0	738.0	735.1	736.0
22.5°	731.2	728.3	724.4	724.4	719.6	718.6	715.7	714.7
25°	707.0	703.1	700.2	699.2	695.4	693.4	692.5	690.5
27.5°	675.0	672.1	669.2	667.3	662.4	661.5	658.6	659.5
30°	635.3	633.4	632.4	630.5	624.7	622.7	622.7	619.8
32.5°	591.7	588.8	586.9	584.0	579.2	578.2	575.3	576.2
35°	538.5	534.6	531.7	532.7	526.9	525.9	523.9	524.9
37.5°	483.3	479.4	475.5	474.6	469.7	469.7	466.8	466.8
40°	426.1	422.3	420.3	420.3	414.5	415.5	412.6	411.6
42.5°	374.8	370.9	370.0	369.0	366.1	365.1	362.2	363.2
45°	326.4	325.4	325.4	323.5	320.6	319.6	320.6	320.6
47.5°	283.8	284.7	283.8	283.8	281.8	283.8	281.8	282.8
50°	247.9	249.9	249.9	249.9	248.9	249.9	249.9	250.8
52.5°	217.9	220.8	219.8	220.8	219.8	221.8	220.8	221.8
55°	191.8	193.7	194.7	195.6	195.6	195.6	195.6	195.6
57.5°	167.5	170.5	171.4	172.4	172.4	174.3	172.4	172.4
60°	148.2	151.1	152.1	153.0	153.0	154.0	152.1	153.0
62.5°	130.7	133.7	133.7	134.6	134.6	134.6	132.7	133.7
65°	113.3	114.3	115.2	115.2	114.3	114.3	113.3	114.3
67.5°	93.9	94.9	93.9	93.9	93.0	93.0	91.0	92.0
70°	72.6	72.6	73.6	72.6	71.7	72.6	71.7	70.7
72.5°	54.2	54.2	54.2	53.3	53.3	52.3	53.3	53.3
75°	36.8	36.8	37.8	37.8	37.8	37.8	36.8	36.8
77.5°	24.2	24.2	24.2	24.2	25.2	24.2	24.2	24.2
80°	15.5	15.5	16.5	16.5	15.5	15.5	15.5	15.5
82.5°	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
85°	5.8	5.8	5.8	5.8	4.8	4.8	4.8	4.8
87.5°	2.9	2.9	2.9	2.9	2.9	2.9	1.9	1.9
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)