

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: P252582

Luminaire Tested: **LD6B20D010 EU6B10209730 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252582
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 EU6B10209730 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 97CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1516.0 lumens
Efficiency: N/A
Efficacy: 72.9 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

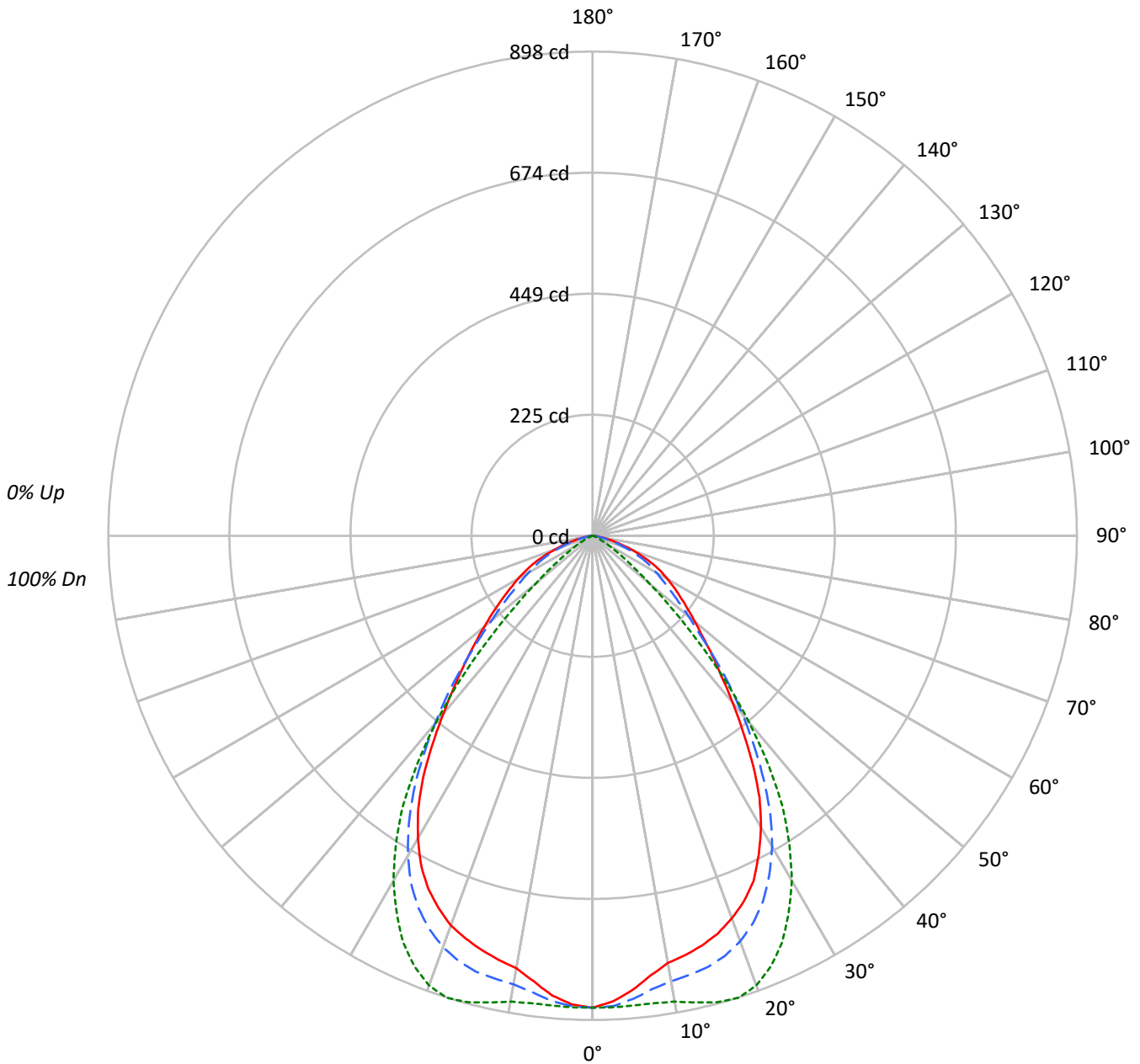
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252582

CATALOG NUMBER: LD6B20D010 EU6B10209730 6LBDW1LI

Luminous Intensity Polar Plot





TEST NUMBER: P252582

CATALOG NUMBER: LD6B20D010 EU6B10209730 6LBDW1LI

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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89																			
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79																			
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70																			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62																			
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56																			
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50																			
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46																			
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42																			
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38																			
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	57105	57105	57105
5°	55398	57258	56059
10°	53289	58119	53965
15°	53102	60484	53716
20°	52411	61610	53390
25°	50843	59877	51937
30°	47031	55649	48786
35°	41264	48917	43677
40°	34381	38350	36621
45°	28943	25299	30899
50°	25059	13864	26602
55°	22669	7371	23249
60°	20864	3823	20864
65°	18895	2038	18432
70°	15241	1164	14096
75°	10461	756	9705
80°	6838	376	6086
85°	4566	749	3818



TEST NUMBER: P252582

CATALOG NUMBER: LD6B20D010 EU6B10209730 6LBDW1LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.6	5.4
10°-20°	236.0	15.6
20°-30°	348.7	23.0
30°-40°	352.2	23.2
40°-50°	242.8	16.0
50°-60°	139.4	9.2
60°-70°	81.2	5.4
70°-80°	29.6	2.0
80°-90°	4.5	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°	666.3	44.0
0°-40°	1018.5	67.2
0°-60°	1400.7	92.4
0°-90°	1516.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1516.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	875	875	875	875	875	
5°	846	862	874	866	856	79
15°	786	828	896	837	795	221
25°	706	748	832	763	722	322
35°	518	554	614	579	548	322
45°	314	318	274	338	335	244
55°	199	175	65	182	204	179
65°	122	103	13	102	119	120
75°	42	33	3	32	38	47
85°	6	3	1	4	5	8
90°	0	0	0	0	0	



TEST NUMBER: P252582

CATALOG NUMBER: LD6B20D010 EU6B10209730 6LBDW1LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	875.3	875.3	875.3	875.3	875.3	875.3	875.3	875.3	875.3	875.3	875.3
2.5°	864.1	865.1	866.2	865.1	866.2	870.2	867.2	869.2	869.2	870.2	873.2
5°	845.9	845.9	847.9	846.9	850.0	854.0	851.0	854.0	855.0	857.0	862.1
7.5°	822.6	822.6	823.7	823.7	827.7	831.8	829.7	833.8	837.8	841.9	847.9
10°	804.4	806.5	806.5	807.5	811.5	816.6	815.6	820.6	824.7	830.7	838.8
12.5°	796.3	797.3	797.3	799.4	803.4	808.5	807.5	812.5	818.6	825.7	833.8
15°	786.2	788.2	787.2	789.3	793.3	798.4	797.3	802.4	809.5	816.6	827.7
17.5°	773.1	774.1	775.1	775.1	779.1	783.2	783.2	788.2	796.3	804.4	816.6
20°	754.9	756.9	756.9	757.9	760.9	767.0	766.0	771.0	779.1	787.2	800.4
22.5°	733.6	734.6	734.6	735.6	740.7	743.7	744.7	748.8	755.9	765.0	777.1
25°	706.3	707.3	706.3	709.3	711.3	717.4	715.4	720.4	728.5	735.6	747.8
27.5°	666.8	668.8	668.8	669.9	674.9	680.0	680.0	685.0	692.1	697.2	709.3
30°	624.3	627.4	624.3	629.4	631.4	635.5	638.5	641.5	647.6	654.7	665.8
32.5°	575.8	574.7	575.8	577.8	583.8	586.9	588.9	591.9	598.0	604.1	613.2
35°	518.1	520.1	521.1	525.2	525.2	530.2	531.2	533.3	542.4	546.4	553.5
37.5°	457.4	459.4	460.4	462.4	466.5	468.5	471.5	474.6	480.6	487.7	491.8
40°	403.7	403.7	404.7	406.8	409.8	410.8	413.9	417.9	421.9	428.0	432.1
42.5°	353.1	354.2	353.1	355.2	358.2	362.2	361.2	366.3	367.3	371.4	374.4
45°	313.7	313.7	311.7	313.7	313.7	317.7	316.7	318.7	317.7	319.7	317.7
47.5°	276.2	277.3	276.2	277.3	277.3	277.3	278.3	276.2	277.3	274.2	268.1
50°	246.9	247.9	245.9	246.9	245.9	244.9	245.9	242.8	241.8	237.8	231.7
52.5°	221.6	220.6	219.6	219.6	219.6	218.6	217.6	214.5	211.5	207.4	200.3
55°	199.3	198.3	197.3	197.3	195.3	194.3	194.3	191.2	188.2	183.1	175.1
57.5°	179.1	178.1	177.1	177.1	176.1	174.0	174.0	171.0	167.0	160.9	153.8
60°	159.9	159.9	159.9	158.9	158.9	156.8	156.8	153.8	149.8	143.7	135.6
62.5°	142.7	141.7	141.7	141.7	141.7	140.6	139.6	137.6	133.6	127.5	120.4
65°	122.4	122.4	122.4	122.4	121.4	121.4	121.4	118.4	116.4	110.3	103.2
67.5°	100.2	100.2	100.2	100.2	99.2	100.2	100.2	98.2	96.1	90.1	84.0
70°	79.9	78.9	77.9	78.9	77.9	77.9	78.9	76.9	75.9	70.8	64.8
72.5°	58.7	59.7	58.7	58.7	58.7	57.7	58.7	57.7	55.7	51.6	47.6
75°	41.5	42.5	42.5	41.5	41.5	41.5	40.5	40.5	38.5	35.4	33.4
77.5°	28.3	28.3	28.3	28.3	27.3	27.3	27.3	26.3	25.3	23.3	21.2
80°	18.2	18.2	18.2	18.2	17.2	17.2	17.2	16.2	16.2	14.2	12.1
82.5°	11.1	11.1	11.1	11.1	11.1	11.1	10.1	10.1	9.1	8.1	7.1
85°	6.1	6.1	6.1	6.1	6.1	6.1	6.1	5.1	5.1	4.0	3.0
87.5°	2.0	2.0	3.0	3.0	3.0	3.0	3.0	3.0	2.0	2.0	2.0
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: P252582

CATALOG NUMBER: LD6B20D010 EU6B10209730 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	875.3	875.3	875.3	875.3	875.3	875.3	875.3	875.3	875.3	875.3	875.3
2.5°	871.2	872.2	872.2	872.2	875.3	876.3	873.2	870.2	876.3	875.3	877.3
5°	861.1	864.1	866.2	867.2	870.2	872.2	869.2	868.2	873.2	874.3	875.3
7.5°	849.0	854.0	859.1	861.1	865.1	867.2	866.2	866.2	872.2	874.3	874.3
10°	840.9	847.9	854.0	859.1	864.1	867.2	867.2	868.2	875.3	877.3	879.3
12.5°	838.8	847.9	856.0	863.1	867.2	872.2	873.2	876.3	883.4	886.4	886.4
15°	833.8	845.9	856.0	865.1	871.2	877.3	879.3	885.4	893.5	895.5	897.5
17.5°	824.7	836.8	849.0	860.1	868.2	873.2	879.3	885.4	895.5	898.5	899.5
20°	808.5	822.6	834.8	845.9	854.0	861.1	867.2	874.3	883.4	887.4	888.4
22.5°	784.2	798.4	810.5	822.6	830.7	836.8	842.9	851.0	860.1	864.1	864.1
25°	754.9	768.0	781.2	790.3	798.4	805.4	808.5	817.6	826.7	831.8	831.8
27.5°	717.4	729.6	741.7	751.8	756.9	762.9	768.0	776.1	783.2	787.2	791.3
30°	669.9	682.0	693.1	703.2	709.3	715.4	720.4	726.5	733.6	738.7	739.7
32.5°	618.2	628.4	639.5	649.6	655.7	657.7	662.8	668.8	674.9	679.0	680.0
35°	561.6	568.7	575.8	584.9	590.9	590.9	596.0	600.0	605.1	614.2	612.2
37.5°	494.8	504.9	510.0	513.0	517.1	521.1	522.1	527.2	533.3	535.3	538.3
40°	432.1	435.1	438.1	438.1	442.2	442.2	442.2	443.2	449.3	450.3	454.3
42.5°	369.3	369.3	366.3	363.3	364.3	363.3	358.2	358.2	361.2	365.3	365.3
45°	310.6	303.6	294.5	287.4	282.3	280.3	274.2	274.2	273.2	274.2	278.3
47.5°	261.1	248.9	233.7	219.6	214.5	210.5	201.4	197.3	195.3	196.3	198.3
50°	219.6	206.4	189.2	172.0	162.9	157.9	146.7	139.6	138.6	136.6	140.6
52.5°	189.2	173.0	154.8	134.6	125.5	117.4	105.2	99.2	95.1	95.1	96.1
55°	162.9	145.7	125.5	105.2	96.1	90.1	77.9	69.8	65.8	64.8	67.8
57.5°	140.6	124.5	104.2	84.0	74.9	67.8	55.7	48.6	45.5	43.5	44.5
60°	123.4	107.3	87.0	67.8	59.7	51.6	41.5	33.4	29.3	29.3	30.4
62.5°	107.3	92.1	73.9	55.7	48.6	41.5	30.4	23.3	20.2	19.2	20.2
65°	91.1	76.9	61.7	46.5	39.5	33.4	24.3	18.2	14.2	13.2	14.2
67.5°	73.9	62.7	49.6	37.4	31.4	26.3	18.2	13.2	10.1	9.1	10.1
70°	57.7	47.6	37.4	27.3	23.3	19.2	13.2	10.1	7.1	6.1	7.1
72.5°	41.5	34.4	26.3	19.2	16.2	13.2	9.1	7.1	5.1	4.0	5.1
75°	28.3	23.3	17.2	12.1	10.1	9.1	6.1	4.0	3.0	3.0	3.0
77.5°	18.2	14.2	11.1	8.1	6.1	5.1	3.0	2.0	2.0	2.0	2.0
80°	10.1	8.1	6.1	4.0	3.0	3.0	2.0	2.0	1.0	1.0	1.0
82.5°	6.1	4.0	3.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0
85°	3.0	2.0	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



TEST NUMBER: P252582

CATALOG NUMBER: LD6B20D010 EU6B10209730 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	875.3	875.3	875.3	875.3	875.3	875.3	875.3	875.3	875.3	875.3	875.3
2.5°	873.2	874.3	871.2	875.3	872.2	876.3	876.3	872.2	873.2	871.2	875.3
5°	871.2	871.2	869.2	872.2	868.2	872.2	871.2	864.1	866.2	862.1	866.2
7.5°	871.2	869.2	866.2	869.2	864.1	867.2	863.1	856.0	854.0	849.0	849.0
10°	874.3	871.2	867.2	868.2	863.1	864.1	858.1	847.9	844.9	838.8	836.8
12.5°	881.3	878.3	872.2	874.3	867.2	867.2	859.1	846.9	840.9	832.8	830.7
15°	891.5	886.4	879.3	880.3	873.2	869.2	859.1	844.9	836.8	825.7	822.6
17.5°	893.5	888.4	879.3	879.3	870.2	865.1	853.0	836.8	826.7	815.6	809.5
20°	882.3	877.3	867.2	866.2	858.1	851.0	837.8	821.6	811.5	799.4	794.3
22.5°	859.1	853.0	843.9	842.9	834.8	830.7	816.6	800.4	790.3	778.1	774.1
25°	824.7	821.6	812.5	811.5	804.4	799.4	787.2	772.1	762.9	750.8	746.8
27.5°	784.2	781.2	772.1	772.1	764.0	760.9	749.8	735.6	728.5	717.4	712.4
30°	735.6	731.6	726.5	725.5	718.4	715.4	705.3	692.1	685.0	675.9	673.9
32.5°	677.9	674.9	671.9	670.9	663.8	660.7	653.7	640.5	634.4	626.3	623.3
35°	611.2	609.1	606.1	605.1	602.1	599.0	591.9	581.8	578.8	572.7	569.7
37.5°	534.3	536.3	534.3	534.3	531.2	532.2	526.2	520.1	517.1	513.0	511.0
40°	451.3	455.3	458.4	458.4	457.4	461.4	460.4	455.3	454.3	452.3	451.3
42.5°	367.3	369.3	375.4	379.4	378.4	388.6	389.6	393.6	396.7	394.6	395.6
45°	279.3	285.3	293.4	297.5	302.5	315.7	322.8	330.9	338.0	342.0	341.0
47.5°	201.4	208.4	217.6	223.6	232.7	248.9	267.1	277.3	287.4	292.4	297.5
50°	145.7	152.8	163.9	173.0	179.1	201.4	220.6	233.7	244.9	252.0	257.0
52.5°	102.2	110.3	122.4	130.5	139.6	160.9	183.1	198.3	210.5	219.6	224.6
55°	70.8	79.9	91.1	99.2	109.3	131.5	152.8	169.0	182.1	190.2	196.3
57.5°	49.6	57.7	68.8	75.9	86.0	107.3	128.5	144.7	157.9	165.9	173.0
60°	33.4	41.5	52.6	59.7	67.8	89.0	108.3	125.5	137.6	145.7	152.8
62.5°	23.3	30.4	41.5	48.6	55.7	73.9	92.1	107.3	119.4	128.5	134.6
65°	18.2	24.3	33.4	39.5	46.5	61.7	76.9	90.1	102.2	111.3	115.4
67.5°	13.2	19.2	26.3	31.4	36.4	49.6	62.7	72.9	84.0	91.1	96.1
70°	9.1	13.2	19.2	23.3	27.3	37.4	47.6	56.7	64.8	69.8	73.9
72.5°	7.1	9.1	13.2	16.2	19.2	26.3	34.4	41.5	47.6	51.6	55.7
75°	4.0	6.1	9.1	11.1	13.2	18.2	23.3	28.3	32.4	35.4	37.4
77.5°	2.0	3.0	5.1	6.1	8.1	11.1	15.2	18.2	21.2	23.3	25.3
80°	2.0	2.0	3.0	3.0	4.0	6.1	8.1	10.1	12.1	14.2	15.2
82.5°	1.0	1.0	2.0	2.0	2.0	3.0	4.0	6.1	7.1	8.1	9.1
85°	1.0	1.0	1.0	1.0	1.0	2.0	2.0	3.0	4.0	5.1	5.1
87.5°	0.0	0.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0	2.0	3.0
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: P252582

CATALOG NUMBER: LD6B20D010 EU6B10209730 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	875.3	875.3	875.3	875.3	875.3	875.3	875.3	875.3
2.5°	872.2	874.3	873.2	875.3	872.2	871.2	873.2	870.2
5°	861.1	862.1	861.1	861.1	859.1	857.0	859.1	856.0
7.5°	843.9	843.9	840.9	840.9	836.8	834.8	834.8	833.8
10°	829.7	826.7	823.7	824.7	818.6	816.6	815.6	814.6
12.5°	822.6	820.6	815.6	815.6	809.5	807.5	806.5	805.4
15°	814.6	810.5	806.5	805.4	800.4	798.4	797.3	795.3
17.5°	800.4	797.3	792.3	792.3	787.2	786.2	784.2	783.2
20°	785.2	781.2	777.1	777.1	771.0	771.0	768.0	769.0
22.5°	764.0	760.9	756.9	756.9	751.8	750.8	747.8	746.8
25°	738.7	734.6	731.6	730.6	726.5	724.5	723.5	721.5
27.5°	705.3	702.2	699.2	697.2	692.1	691.1	688.1	689.1
30°	663.8	661.8	660.7	658.7	652.7	650.6	650.6	647.6
32.5°	618.2	615.2	613.2	610.2	605.1	604.1	601.0	602.1
35°	562.6	558.5	555.5	556.5	550.5	549.4	547.4	548.4
37.5°	504.9	500.9	496.8	495.8	490.8	490.8	487.7	487.7
40°	445.2	441.2	439.1	439.1	433.1	434.1	431.1	430.0
42.5°	391.6	387.5	386.5	385.5	382.5	381.5	378.4	379.4
45°	341.0	340.0	340.0	338.0	334.9	333.9	334.9	334.9
47.5°	296.5	297.5	296.5	296.5	294.5	296.5	294.5	295.5
50°	259.0	261.1	261.1	261.1	260.0	261.1	261.1	262.1
52.5°	227.7	230.7	229.7	230.7	229.7	231.7	230.7	231.7
55°	200.3	202.4	203.4	204.4	204.4	204.4	204.4	204.4
57.5°	175.1	178.1	179.1	180.1	180.1	182.1	180.1	180.1
60°	154.8	157.9	158.9	159.9	159.9	160.9	158.9	159.9
62.5°	136.6	139.6	139.6	140.6	140.6	140.6	138.6	139.6
65°	118.4	119.4	120.4	120.4	119.4	119.4	118.4	119.4
67.5°	98.2	99.2	98.2	98.2	97.1	97.1	95.1	96.1
70°	75.9	75.9	76.9	75.9	74.9	75.9	74.9	73.9
72.5°	56.7	56.7	56.7	55.7	55.7	54.6	55.7	55.7
75°	38.5	38.5	39.5	39.5	39.5	39.5	38.5	38.5
77.5°	25.3	25.3	25.3	25.3	26.3	25.3	25.3	25.3
80°	16.2	16.2	17.2	17.2	16.2	16.2	16.2	16.2
82.5°	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
85°	6.1	6.1	6.1	6.1	5.1	5.1	5.1	5.1
87.5°	3.0	3.0	3.0	3.0	3.0	3.0	2.0	2.0
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)