

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: P252369

Luminaire Tested: **LD6B20D010 EU6B10209030 6LBLWW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252369  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-5)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD6B20D010 EU6B10209030 6LBLWW1LI  
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1574.0 lumens  
Efficiency: N/A  
Efficacy: 75.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.03 / 1.12  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

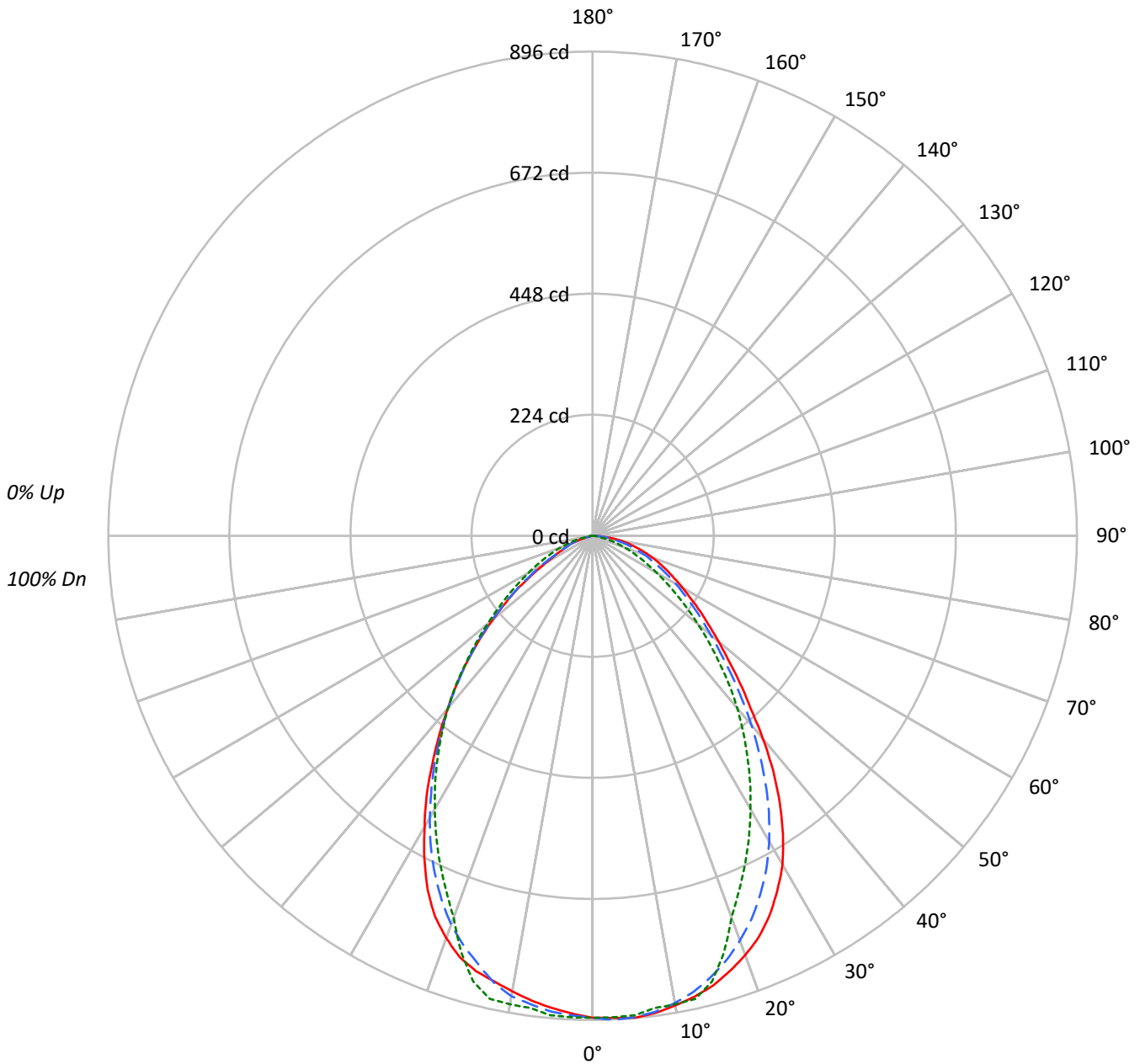
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				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				100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77				77
3	95	86	80	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68				68
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60				60
5	82	71	63	57	80	70	63	57	68	62	57	66	60	56	64	59	55	54				54
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48				48
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44				44
8	67	55	47	42	66	54	47	42	53	46	42	52	46	42	51	45	41	40				40
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36				36
10	59	47	40	35	58	47	40	35	46	40	35	45	39	35	44	39	35	33				33

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	58182	58182	58182
5°	58633	58332	57421
10°	58470	58317	56701
15°	58201	57654	56323
20°	57333	52189	55001
25°	55781	48108	52024
30°	52959	43980	46857
35°	48057	39758	41232
40°	41723	35412	35514
45°	35586	30456	30133
50°	30804	25750	24339
55°	27537	21475	18836
60°	25092	17837	12696
65°	23418	14665	9478
70°	22318	11922	7954
75°	21023	8470	2622
80°	20025	4358	864
85°	16468	2620	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.2	5.4
10°-20°	235.6	15.0
20°-30°	325.1	20.7
30°-40°	330.9	21.0
40°-50°	265.9	16.9
50°-60°	176.8	11.2
60°-70°	100.7	6.4
70°-80°	45.3	2.9
80°-90°	9.5	0.6
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°	644.9	41.0
0°-40°	975.8	62.0
0°-60°	1418.5	90.1
0°-90°	1574.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1574.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	892	892	892	892	892	
5°	895	894	891	884	877	85
15°	862	846	854	820	834	243
25°	775	733	668	690	723	355
35°	603	557	499	508	518	375
45°	386	362	330	327	327	299
55°	242	226	189	168	166	218
65°	152	136	95	61	61	151
75°	83	70	34	14	10	89
85°	22	15	4	1	0	26
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°	891.8	891.8	891.8	891.8	891.8	891.8	891.8	891.8	891.8	891.8	891.8
2.5°	893.0	897.6	896.5	895.3	896.5	895.3	893.0	893.0	890.7	890.7	896.5
5°	895.3	897.6	896.5	895.3	895.3	896.5	891.8	891.8	889.5	888.4	894.2
7.5°	890.7	894.2	891.8	891.8	890.7	891.8	887.2	887.2	883.7	882.6	888.4
10°	882.6	887.2	884.9	884.9	884.9	882.6	880.3	879.1	875.6	874.5	877.9
12.5°	873.3	876.8	875.6	873.3	873.3	873.3	868.7	867.5	862.9	860.6	864.0
15°	861.7	864.0	862.9	861.7	859.4	859.4	854.8	852.5	847.8	843.2	845.5
17.5°	844.4	847.8	845.5	844.4	840.9	840.9	836.2	833.9	827.0	822.3	823.5
20°	825.8	827.0	825.8	823.5	820.0	818.9	814.2	809.6	803.8	798.0	796.9
22.5°	803.8	805.0	801.5	799.2	795.7	794.5	788.8	785.3	776.0	769.1	767.9
25°	774.9	776.0	776.0	770.2	767.9	765.6	759.8	754.0	745.9	736.6	733.2
27.5°	740.1	743.6	741.3	735.5	730.8	729.7	723.9	719.3	708.8	700.7	696.1
30°	703.0	701.9	700.7	697.3	690.3	689.2	683.4	677.6	669.5	659.0	653.2
32.5°	655.6	655.6	654.4	650.9	644.0	641.7	637.0	630.1	620.8	612.7	606.9
35°	603.4	604.6	603.4	596.5	591.9	589.5	587.2	579.1	571.0	561.7	557.1
37.5°	549.0	545.5	546.7	540.9	535.1	537.4	530.5	527.0	517.7	510.8	506.1
40°	489.9	492.3	487.6	485.3	481.8	478.4	478.4	472.6	467.9	459.8	457.5
42.5°	432.0	435.5	434.3	432.0	427.4	428.5	422.8	420.4	414.6	411.2	407.7
45°	385.7	385.7	385.7	383.4	382.2	379.9	376.4	373.0	369.5	364.8	362.5
47.5°	340.5	340.5	341.7	339.4	337.0	335.9	333.6	333.6	327.8	323.1	320.8
50°	303.5	303.5	303.5	301.1	298.8	298.8	296.5	294.2	290.7	287.2	284.9
52.5°	269.9	269.9	269.9	267.6	266.4	265.2	264.1	262.9	258.3	256.0	253.7
55°	242.1	240.9	240.9	239.8	237.4	237.4	236.3	234.0	230.5	227.0	225.9
57.5°	214.3	215.4	214.3	214.3	212.0	212.0	209.6	208.5	205.0	202.7	200.4
60°	192.3	192.3	192.3	191.1	188.8	190.0	187.6	186.5	183.0	179.5	177.2
62.5°	170.3	171.4	171.4	170.3	167.9	167.9	166.8	165.6	162.2	158.7	155.2
65°	151.7	151.7	151.7	150.6	149.4	149.4	148.3	147.1	143.6	139.0	135.5
67.5°	134.4	133.2	133.2	133.2	132.0	130.9	129.7	128.6	125.1	121.6	117.0
70°	117.0	117.0	117.0	115.8	113.5	114.7	113.5	112.3	108.9	105.4	101.9
72.5°	100.8	100.8	99.6	98.5	98.5	97.3	97.3	96.1	92.7	88.0	84.6
75°	83.4	83.4	83.4	83.4	81.1	82.2	79.9	78.8	76.4	73.0	69.5
77.5°	68.3	68.3	68.3	67.2	66.0	66.0	64.9	63.7	60.2	57.9	53.3
80°	53.3	53.3	53.3	53.3	52.1	51.0	49.8	48.6	46.3	42.9	39.4
82.5°	39.4	39.4	38.2	38.2	38.2	37.1	35.9	34.7	32.4	30.1	27.8
85°	22.0	23.2	23.2	20.8	22.0	20.8	20.8	18.5	18.5	16.2	15.1
87.5°	8.1	6.9	6.9	6.9	6.9	6.9	6.9	5.8	5.8	5.8	4.6
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°	891.8	891.8	891.8	891.8	891.8	891.8	891.8	891.8	891.8	891.8	891.8
2.5°	891.8	890.7	895.3	895.3	888.4	891.8	893.0	890.7	890.7	891.8	888.4
5°	889.5	887.2	891.8	893.0	886.1	889.5	890.7	888.4	889.5	890.7	886.1
7.5°	881.4	881.4	884.9	886.1	879.1	882.6	882.6	880.3	881.4	881.4	877.9
10°	873.3	869.8	873.3	873.3	867.5	868.7	871.0	869.8	874.5	880.3	880.3
12.5°	858.3	854.8	860.6	860.6	857.1	861.7	867.5	871.0	875.6	877.9	871.0
15°	839.7	840.9	851.3	859.4	855.9	862.9	868.7	866.4	860.6	853.6	843.2
17.5°	815.4	811.9	821.2	825.8	821.2	823.5	828.1	823.5	814.2	808.4	794.5
20°	787.6	778.3	778.3	776.0	767.9	767.9	766.8	758.6	755.2	751.7	745.9
22.5°	756.3	745.9	742.4	735.5	728.5	727.4	723.9	715.8	711.2	708.8	701.9
25°	720.4	711.2	705.4	698.4	688.0	685.7	682.2	674.1	671.8	668.3	662.5
27.5°	683.4	671.8	663.7	656.7	647.5	646.3	639.3	633.6	628.9	626.6	622.0
30°	640.5	627.8	622.0	612.7	605.8	603.4	597.6	589.5	586.1	583.8	580.3
32.5°	593.0	582.6	576.8	568.7	559.4	560.6	553.6	546.7	544.4	542.1	538.6
35°	546.7	536.3	529.3	522.4	516.6	514.3	509.6	503.8	500.4	499.2	496.9
37.5°	495.7	487.6	481.8	474.9	470.2	467.9	465.6	459.8	457.5	457.5	452.9
40°	445.9	439.0	434.3	430.9	425.1	423.9	421.6	418.1	417.0	415.8	412.3
42.5°	400.7	391.5	388.0	385.7	382.2	379.9	378.7	376.4	375.3	374.1	370.6
45°	357.9	349.8	346.3	344.0	340.5	339.4	338.2	334.7	332.4	330.1	328.9
47.5°	316.2	310.4	309.2	303.5	301.1	298.8	296.5	294.2	293.0	291.9	287.2
50°	280.3	276.8	271.0	267.6	265.2	264.1	259.4	256.0	254.8	253.7	250.2
52.5°	247.9	243.2	239.8	234.0	232.8	230.5	228.2	223.5	221.2	220.1	216.6
55°	218.9	215.4	210.8	206.2	202.7	201.5	198.1	193.4	191.1	188.8	186.5
57.5°	194.6	188.8	184.2	179.5	177.2	173.7	170.3	167.9	164.5	161.0	157.5
60°	171.4	166.8	161.0	156.4	154.0	151.7	147.1	143.6	140.1	136.7	133.2
62.5°	149.4	144.8	139.0	134.4	132.0	129.7	125.1	121.6	118.1	114.7	110.0
65°	129.7	125.1	120.5	115.8	113.5	111.2	106.6	101.9	98.5	95.0	90.3
67.5°	113.5	107.7	103.1	98.5	96.1	93.8	89.2	85.7	81.1	77.6	73.0
70°	96.1	91.5	88.0	83.4	81.1	78.8	74.1	69.5	66.0	62.5	57.9
72.5°	81.1	75.3	71.8	67.2	64.9	63.7	59.1	55.6	52.1	47.5	44.0
75°	64.9	60.2	55.6	52.1	49.8	48.6	44.0	40.5	37.1	33.6	30.1
77.5°	49.8	46.3	41.7	38.2	35.9	34.7	30.1	26.6	23.2	20.8	17.4
80°	37.1	32.4	30.1	26.6	25.5	23.2	20.8	17.4	15.1	11.6	9.3
82.5°	25.5	22.0	19.7	17.4	16.2	15.1	12.7	10.4	8.1	6.9	5.8
85°	13.9	11.6	10.4	9.3	8.1	8.1	6.9	5.8	4.6	3.5	2.3
87.5°	4.6	3.5	3.5	3.5	3.5	2.3	2.3	2.3	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):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	891.8	891.8	891.8	891.8	891.8	891.8	891.8	891.8	891.8	891.8	891.8
2.5°	890.7	890.7	890.7	889.5	889.5	889.5	888.4	893.0	888.4	887.2	890.7
5°	889.5	887.2	887.2	887.2	887.2	886.1	884.9	887.2	883.7	882.6	882.6
7.5°	882.6	881.4	881.4	880.3	879.1	877.9	876.8	877.9	874.5	873.3	873.3
10°	883.7	881.4	881.4	877.9	875.6	872.2	868.7	869.8	865.2	861.7	861.7
12.5°	869.8	864.0	860.6	857.1	854.8	853.6	849.0	851.3	846.7	845.5	845.5
15°	838.6	831.6	825.8	823.5	823.5	821.2	817.7	822.3	820.0	821.2	827.0
17.5°	789.9	786.4	783.0	781.8	783.0	785.3	787.6	794.5	794.5	798.0	803.8
20°	747.1	744.7	747.1	747.1	748.2	752.9	757.5	763.3	765.6	769.1	777.2
22.5°	705.4	705.4	707.7	711.2	710.0	718.1	719.3	729.7	729.7	736.6	743.6
25°	664.8	664.8	667.1	668.3	670.6	675.3	679.9	688.0	690.3	697.3	703.0
27.5°	625.4	624.3	624.3	625.4	627.8	633.6	635.9	645.1	648.6	653.2	659.0
30°	581.4	580.3	582.6	584.9	583.8	589.5	593.0	600.0	602.3	606.9	611.5
32.5°	539.7	539.7	539.7	542.1	542.1	546.7	546.7	554.8	554.8	558.3	562.9
35°	496.9	496.9	498.0	499.2	500.4	501.5	502.7	507.3	508.5	509.6	511.9
37.5°	456.3	455.2	456.3	456.3	454.0	458.7	458.7	463.3	459.8	463.3	464.5
40°	414.6	414.6	413.5	413.5	413.5	415.8	413.5	417.0	414.6	417.0	415.8
42.5°	371.8	371.8	369.5	371.8	370.6	370.6	370.6	373.0	369.5	371.8	373.0
45°	328.9	327.8	327.8	326.6	326.6	326.6	327.8	327.8	326.6	328.9	328.9
47.5°	287.2	286.1	286.1	286.1	286.1	287.2	283.8	286.1	283.8	283.8	283.8
50°	251.3	250.2	249.0	247.9	246.7	246.7	245.5	245.5	243.2	242.1	240.9
52.5°	216.6	215.4	213.1	213.1	212.0	210.8	207.3	207.3	203.8	202.7	202.7
55°	185.3	181.8	180.7	178.4	178.4	176.1	173.7	171.4	167.9	165.6	165.6
57.5°	156.4	152.9	150.6	149.4	148.3	145.9	141.3	140.1	135.5	134.4	133.2
60°	130.9	127.4	123.9	121.6	120.5	117.0	112.3	110.0	107.7	104.2	100.8
62.5°	106.6	103.1	98.5	97.3	95.0	91.5	88.0	84.6	82.2	78.8	76.4
65°	85.7	82.2	78.8	76.4	74.1	70.7	67.2	63.7	61.4	60.2	59.1
67.5°	69.5	64.9	61.4	60.2	57.9	55.6	52.1	51.0	48.6	48.6	48.6
70°	54.4	51.0	47.5	46.3	45.2	42.9	40.5	40.5	40.5	40.5	40.5
72.5°	40.5	38.2	34.7	33.6	32.4	31.3	29.0	30.1	29.0	29.0	29.0
75°	25.5	23.2	20.8	19.7	18.5	17.4	16.2	15.1	13.9	12.7	12.7
77.5°	13.9	11.6	10.4	9.3	9.3	8.1	6.9	6.9	5.8	5.8	5.8
80°	8.1	6.9	5.8	4.6	4.6	3.5	3.5	3.5	3.5	2.3	2.3
82.5°	4.6	3.5	2.3	2.3	2.3	2.3	1.2	1.2	1.2	1.2	1.2
85°	2.3	2.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.0
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):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	891.8	891.8	891.8	891.8	891.8	891.8	891.8	891.8
2.5°	884.9	888.4	884.9	888.4	888.4	888.4	888.4	884.9
5°	879.1	881.4	877.9	880.3	881.4	880.3	880.3	876.8
7.5°	868.7	871.0	867.5	871.0	872.2	871.0	869.8	867.5
10°	858.3	859.4	855.9	858.3	860.6	860.6	859.4	855.9
12.5°	842.0	845.5	842.0	844.4	846.7	847.8	847.8	844.4
15°	823.5	829.3	827.0	830.5	833.9	835.1	835.1	833.9
17.5°	805.0	810.8	807.3	813.1	816.6	818.9	820.0	817.7
20°	778.3	785.3	783.0	787.6	792.2	795.7	795.7	792.2
22.5°	743.6	752.9	751.7	755.2	761.0	762.1	764.4	762.1
25°	705.4	712.3	711.2	714.6	721.6	721.6	722.7	722.7
27.5°	661.4	668.3	667.1	669.5	674.1	675.3	676.4	674.1
30°	613.9	617.3	617.3	620.8	624.3	625.4	625.4	622.0
32.5°	561.7	566.4	568.7	567.5	571.0	573.3	572.2	572.2
35°	514.3	515.4	516.6	517.7	518.9	521.2	518.9	517.7
37.5°	463.3	466.8	464.5	466.8	469.1	467.9	466.8	466.8
40°	417.0	418.1	415.8	418.1	419.3	419.3	419.3	417.0
42.5°	370.6	373.0	370.6	373.0	373.0	373.0	373.0	371.8
45°	324.3	326.6	326.6	327.8	327.8	326.6	326.6	326.6
47.5°	281.5	283.8	281.5	283.8	284.9	282.6	282.6	282.6
50°	240.9	239.8	239.8	240.9	240.9	240.9	240.9	239.8
52.5°	199.2	200.4	200.4	200.4	201.5	200.4	201.5	201.5
55°	163.3	163.3	163.3	164.5	163.3	163.3	164.5	165.6
57.5°	130.9	129.7	128.6	128.6	129.7	128.6	128.6	128.6
60°	100.8	99.6	98.5	98.5	98.5	98.5	98.5	97.3
62.5°	75.3	75.3	75.3	76.4	76.4	76.4	76.4	77.6
65°	60.2	60.2	60.2	60.2	60.2	60.2	60.2	61.4
67.5°	48.6	48.6	48.6	49.8	49.8	49.8	49.8	49.8
70°	40.5	40.5	41.7	40.5	41.7	41.7	41.7	41.7
72.5°	27.8	27.8	27.8	27.8	27.8	26.6	27.8	26.6
75°	11.6	11.6	11.6	11.6	11.6	11.6	11.6	10.4
77.5°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
80°	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
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.2	1.2	1.2	1.2	1.2	0.0	0.0	0.0
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)