

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: P252576

Luminaire Tested: **LD6B20D010 EU6B10209027 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252576
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 EU6B10209027 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1668.0 lumens
Efficiency: N/A
Efficacy: 80.2 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

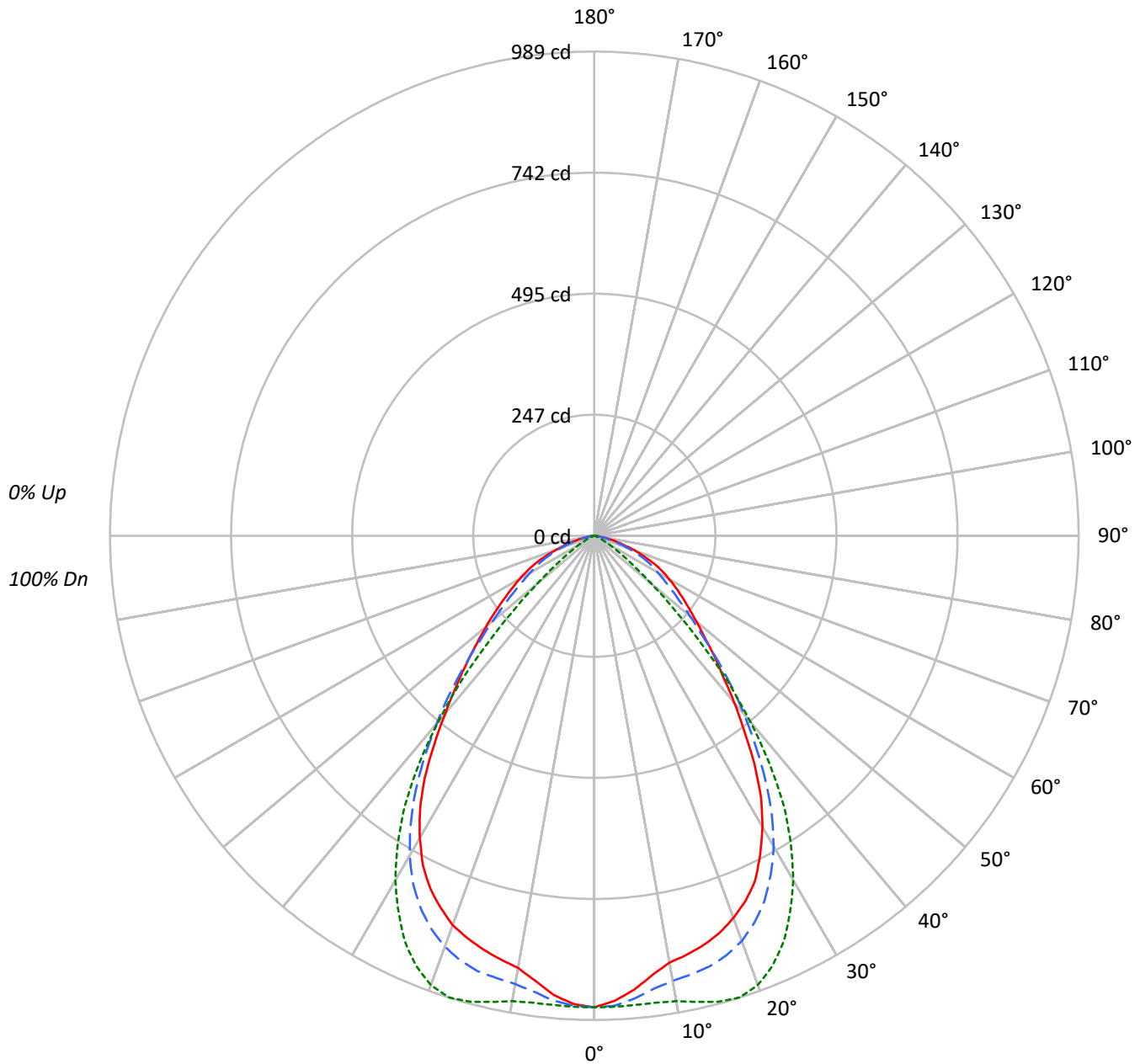
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	62827	62827	62827
5°	60951	62995	61685
10°	58635	63942	59371
15°	58424	66549	59106
20°	57660	67789	58743
25°	55940	65874	57142
30°	51747	61223	53675
35°	45397	53823	48057
40°	37831	42191	40300
45°	31840	27836	33999
50°	27566	15255	29261
55°	24944	8110	25581
60°	22952	4215	22952
65°	20794	2238	20285
70°	16786	1278	15508
75°	11494	832	10663
80°	7514	413	6688
85°	5015	823	4192



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.8	5.4
10°-20°	259.7	15.6
20°-30°	383.7	23.0
30°-40°	387.5	23.2
40°-50°	267.1	16.0
50°-60°	153.4	9.2
60°-70°	89.3	5.4
70°-80°	32.6	2.0
80°-90°	5.0	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°	733.1	44.0
0°-40°	1120.6	67.2
0°-60°	1541.2	92.4
0°-90°	1668.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1668.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	963	963	963	963	963	
5°	931	948	962	953	942	87
15°	865	911	985	921	875	244
25°	777	823	915	839	794	354
35°	570	609	676	637	603	354
45°	345	350	302	372	368	268
55°	219	193	71	200	225	197
65°	135	114	14	112	131	132
75°	46	37	3	36	42	51
85°	7	3	1	4	6	8
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°	963.0	963.0	963.0	963.0	963.0	963.0	963.0	963.0	963.0	963.0	963.0
2.5°	950.8	951.9	953.0	951.9	953.0	957.5	954.1	956.3	956.3	957.5	960.8
5°	930.7	930.7	933.0	931.8	935.2	939.6	936.3	939.6	940.8	943.0	948.5
7.5°	905.1	905.1	906.2	906.2	910.7	915.1	912.9	917.4	921.8	926.3	933.0
10°	885.1	887.3	887.3	888.4	892.9	898.4	897.3	902.9	907.4	914.0	922.9
12.5°	876.2	877.3	877.3	879.5	884.0	889.5	888.4	894.0	900.7	908.5	917.4
15°	865.0	867.3	866.2	868.4	872.8	878.4	877.3	882.9	890.7	898.4	910.7
17.5°	850.6	851.7	852.8	852.8	857.3	861.7	861.7	867.3	876.2	885.1	898.4
20°	830.5	832.8	832.8	833.9	837.2	843.9	842.8	848.3	857.3	866.2	880.6
22.5°	807.2	808.3	808.3	809.4	814.9	818.3	819.4	823.9	831.6	841.7	855.0
25°	777.1	778.2	777.1	780.4	782.7	789.3	787.1	792.7	801.6	809.4	822.7
27.5°	733.7	735.9	735.9	737.0	742.6	748.1	748.1	753.7	761.5	767.1	780.4
30°	686.9	690.3	686.9	692.5	694.7	699.2	702.5	705.8	712.5	720.3	732.6
32.5°	633.5	632.4	633.5	635.7	642.4	645.7	648.0	651.3	658.0	664.7	674.7
35°	570.0	572.2	573.4	577.8	577.8	583.4	584.5	586.7	596.7	601.2	609.0
37.5°	503.2	505.4	506.6	508.8	513.2	515.5	518.8	522.1	528.8	536.6	541.1
40°	444.2	444.2	445.3	447.6	450.9	452.0	455.3	459.8	464.3	470.9	475.4
42.5°	388.5	389.7	388.5	390.8	394.1	398.6	397.5	403.0	404.1	408.6	411.9
45°	345.1	345.1	342.9	345.1	345.1	349.6	348.5	350.7	349.6	351.8	349.6
47.5°	303.9	305.0	303.9	305.0	305.0	305.0	306.2	303.9	305.0	301.7	295.0
50°	271.6	272.8	270.5	271.6	270.5	269.4	270.5	267.2	266.1	261.6	254.9
52.5°	243.8	242.7	241.6	241.6	241.6	240.5	239.4	236.0	232.7	228.2	220.4
55°	219.3	218.2	217.1	217.1	214.9	213.8	213.8	210.4	207.1	201.5	192.6
57.5°	197.1	195.9	194.8	194.8	193.7	191.5	191.5	188.2	183.7	177.0	169.2
60°	175.9	175.9	175.9	174.8	174.8	172.6	172.6	169.2	164.8	158.1	149.2
62.5°	157.0	155.9	155.9	155.9	155.9	154.8	153.6	151.4	147.0	140.3	132.5
65°	134.7	134.7	134.7	134.7	133.6	133.6	133.6	130.3	128.0	121.4	113.6
67.5°	110.2	110.2	110.2	110.2	109.1	110.2	110.2	108.0	105.8	99.1	92.4
70°	88.0	86.8	85.7	86.8	85.7	85.7	86.8	84.6	83.5	77.9	71.3
72.5°	64.6	65.7	64.6	64.6	64.6	63.5	64.6	63.5	61.2	56.8	52.3
75°	45.6	46.8	46.8	45.6	45.6	45.6	44.5	44.5	42.3	39.0	36.7
77.5°	31.2	31.2	31.2	31.2	30.1	30.1	30.1	28.9	27.8	25.6	23.4
80°	20.0	20.0	20.0	20.0	18.9	18.9	18.9	17.8	17.8	15.6	13.4
82.5°	12.2	12.2	12.2	12.2	12.2	12.2	11.1	11.1	10.0	8.9	7.8
85°	6.7	6.7	6.7	6.7	6.7	6.7	6.7	5.6	5.6	4.5	3.3
87.5°	2.2	2.2	3.3	3.3	3.3	3.3	3.3	3.3	2.2	2.2	2.2
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	963.0	963.0	963.0	963.0	963.0	963.0	963.0	963.0	963.0	963.0	963.0
2.5°	958.6	959.7	959.7	959.7	963.0	964.1	960.8	957.5	964.1	963.0	965.2
5°	947.4	950.8	953.0	954.1	957.5	959.7	956.3	955.2	960.8	961.9	963.0
7.5°	934.1	939.6	945.2	947.4	951.9	954.1	953.0	953.0	959.7	961.9	961.9
10°	925.2	933.0	939.6	945.2	950.8	954.1	954.1	955.2	963.0	965.2	967.5
12.5°	922.9	933.0	941.9	949.7	954.1	959.7	960.8	964.1	971.9	975.3	975.3
15°	917.4	930.7	941.9	951.9	958.6	965.2	967.5	974.2	983.1	985.3	987.5
17.5°	907.4	920.7	934.1	946.3	955.2	960.8	967.5	974.2	985.3	988.6	989.7
20°	889.5	905.1	918.5	930.7	939.6	947.4	954.1	961.9	971.9	976.4	977.5
22.5°	862.8	878.4	891.8	905.1	914.0	920.7	927.4	936.3	946.3	950.8	950.8
25°	830.5	845.0	859.5	869.5	878.4	886.2	889.5	899.6	909.6	915.1	915.1
27.5°	789.3	802.7	816.1	827.2	832.8	839.4	845.0	853.9	861.7	866.2	870.6
30°	737.0	750.4	762.6	773.8	780.4	787.1	792.7	799.4	807.2	812.7	813.8
32.5°	680.2	691.4	703.6	714.7	721.4	723.7	729.2	735.9	742.6	747.0	748.1
35°	617.9	625.7	633.5	643.5	650.2	650.2	655.7	660.2	665.8	675.8	673.6
37.5°	544.4	555.5	561.1	564.5	568.9	573.4	574.5	580.0	586.7	588.9	592.3
40°	475.4	478.7	482.1	482.1	486.5	486.5	486.5	487.6	494.3	495.4	499.9
42.5°	406.4	406.4	403.0	399.7	400.8	399.7	394.1	394.1	397.5	401.9	401.9
45°	341.8	334.0	324.0	316.2	310.6	308.4	301.7	301.7	300.6	301.7	306.2
47.5°	287.2	273.9	257.2	241.6	236.0	231.6	221.6	217.1	214.9	216.0	218.2
50°	241.6	227.1	208.2	189.3	179.2	173.7	161.4	153.6	152.5	150.3	154.8
52.5°	208.2	190.4	170.3	148.1	138.1	129.1	115.8	109.1	104.7	104.7	105.8
55°	179.2	160.3	138.1	115.8	105.8	99.1	85.7	76.8	72.4	71.3	74.6
57.5°	154.8	136.9	114.7	92.4	82.4	74.6	61.2	53.4	50.1	47.9	49.0
60°	135.8	118.0	95.7	74.6	65.7	56.8	45.6	36.7	32.3	32.3	33.4
62.5°	118.0	101.3	81.3	61.2	53.4	45.6	33.4	25.6	22.3	21.2	22.3
65°	100.2	84.6	67.9	51.2	43.4	36.7	26.7	20.0	15.6	14.5	15.6
67.5°	81.3	69.0	54.6	41.2	34.5	28.9	20.0	14.5	11.1	10.0	11.1
70°	63.5	52.3	41.2	30.1	25.6	21.2	14.5	11.1	7.8	6.7	7.8
72.5°	45.6	37.9	28.9	21.2	17.8	14.5	10.0	7.8	5.6	4.5	5.6
75°	31.2	25.6	18.9	13.4	11.1	10.0	6.7	4.5	3.3	3.3	3.3
77.5°	20.0	15.6	12.2	8.9	6.7	5.6	3.3	2.2	2.2	2.2	2.2
80°	11.1	8.9	6.7	4.5	3.3	3.3	2.2	2.2	1.1	1.1	1.1
82.5°	6.7	4.5	3.3	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1
85°	3.3	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
87.5°	1.1	1.1	1.1	1.1	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°	963.0	963.0	963.0	963.0	963.0	963.0	963.0	963.0	963.0	963.0	963.0
2.5°	960.8	961.9	958.6	963.0	959.7	964.1	964.1	959.7	960.8	958.6	963.0
5°	958.6	958.6	956.3	959.7	955.2	959.7	958.6	950.8	953.0	948.5	953.0
7.5°	958.6	956.3	953.0	956.3	950.8	954.1	949.7	941.9	939.6	934.1	934.1
10°	961.9	958.6	954.1	955.2	949.7	950.8	944.1	933.0	929.6	922.9	920.7
12.5°	969.7	966.4	959.7	961.9	954.1	954.1	945.2	931.8	925.2	916.3	914.0
15°	980.8	975.3	967.5	968.6	960.8	956.3	945.2	929.6	920.7	908.5	905.1
17.5°	983.1	977.5	967.5	967.5	957.5	951.9	938.5	920.7	909.6	897.3	890.7
20°	970.8	965.2	954.1	953.0	944.1	936.3	921.8	904.0	892.9	879.5	874.0
22.5°	945.2	938.5	928.5	927.4	918.5	914.0	898.4	880.6	869.5	856.1	851.7
25°	907.4	904.0	894.0	892.9	885.1	879.5	866.2	849.5	839.4	826.1	821.6
27.5°	862.8	859.5	849.5	849.5	840.6	837.2	825.0	809.4	801.6	789.3	783.8
30°	809.4	804.9	799.4	798.2	790.5	787.1	776.0	761.5	753.7	743.7	741.5
32.5°	745.9	742.6	739.2	738.1	730.3	727.0	719.2	704.7	698.0	689.1	685.8
35°	672.4	670.2	666.9	665.8	662.4	659.1	651.3	640.2	636.8	630.1	626.8
37.5°	587.8	590.1	587.8	587.8	584.5	585.6	578.9	572.2	568.9	564.5	562.2
40°	496.5	501.0	504.3	504.3	503.2	507.7	506.6	501.0	499.9	497.7	496.5
42.5°	404.1	406.4	413.0	417.5	416.4	427.5	428.6	433.1	436.4	434.2	435.3
45°	307.3	314.0	322.9	327.3	332.9	347.4	355.1	364.1	371.8	376.3	375.2
47.5°	221.6	229.3	239.4	246.0	256.1	273.9	293.9	305.0	316.2	321.7	327.3
50°	160.3	168.1	180.4	190.4	197.1	221.6	242.7	257.2	269.4	277.2	282.8
52.5°	112.4	121.4	134.7	143.6	153.6	177.0	201.5	218.2	231.6	241.6	247.2
55°	77.9	88.0	100.2	109.1	120.2	144.7	168.1	185.9	200.4	209.3	216.0
57.5°	54.6	63.5	75.7	83.5	94.6	118.0	141.4	159.2	173.7	182.6	190.4
60°	36.7	45.6	57.9	65.7	74.6	98.0	119.1	138.1	151.4	160.3	168.1
62.5°	25.6	33.4	45.6	53.4	61.2	81.3	101.3	118.0	131.4	141.4	148.1
65°	20.0	26.7	36.7	43.4	51.2	67.9	84.6	99.1	112.4	122.5	126.9
67.5°	14.5	21.2	28.9	34.5	40.1	54.6	69.0	80.2	92.4	100.2	105.8
70°	10.0	14.5	21.2	25.6	30.1	41.2	52.3	62.3	71.3	76.8	81.3
72.5°	7.8	10.0	14.5	17.8	21.2	28.9	37.9	45.6	52.3	56.8	61.2
75°	4.5	6.7	10.0	12.2	14.5	20.0	25.6	31.2	35.6	39.0	41.2
77.5°	2.2	3.3	5.6	6.7	8.9	12.2	16.7	20.0	23.4	25.6	27.8
80°	2.2	2.2	3.3	3.3	4.5	6.7	8.9	11.1	13.4	15.6	16.7
82.5°	1.1	1.1	2.2	2.2	2.2	3.3	4.5	6.7	7.8	8.9	10.0
85°	1.1	1.1	1.1	1.1	1.1	2.2	2.2	3.3	4.5	5.6	5.6
87.5°	0.0	0.0	1.1	1.1	1.1	1.1	1.1	2.2	2.2	2.2	3.3
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°	963.0	963.0	963.0	963.0	963.0	963.0	963.0	963.0
2.5°	959.7	961.9	960.8	963.0	959.7	958.6	960.8	957.5
5°	947.4	948.5	947.4	947.4	945.2	943.0	945.2	941.9
7.5°	928.5	928.5	925.2	925.2	920.7	918.5	918.5	917.4
10°	912.9	909.6	906.2	907.4	900.7	898.4	897.3	896.2
12.5°	905.1	902.9	897.3	897.3	890.7	888.4	887.3	886.2
15°	896.2	891.8	887.3	886.2	880.6	878.4	877.3	875.1
17.5°	880.6	877.3	871.7	871.7	866.2	865.0	862.8	861.7
20°	863.9	859.5	855.0	855.0	848.3	848.3	845.0	846.1
22.5°	840.6	837.2	832.8	832.8	827.2	826.1	822.7	821.6
25°	812.7	808.3	804.9	803.8	799.4	797.1	796.0	793.8
27.5°	776.0	772.6	769.3	767.1	761.5	760.4	757.1	758.2
30°	730.3	728.1	727.0	724.8	718.1	715.9	715.9	712.5
32.5°	680.2	676.9	674.7	671.3	665.8	664.7	661.3	662.4
35°	619.0	614.6	611.2	612.3	605.6	604.5	602.3	603.4
37.5°	555.5	551.1	546.6	545.5	540.0	540.0	536.6	536.6
40°	489.9	485.4	483.2	483.2	476.5	477.6	474.3	473.2
42.5°	430.9	426.4	425.3	424.2	420.8	419.7	416.4	417.5
45°	375.2	374.1	374.1	371.8	368.5	367.4	368.5	368.5
47.5°	326.2	327.3	326.2	326.2	324.0	326.2	324.0	325.1
50°	285.0	287.2	287.2	287.2	286.1	287.2	287.2	288.3
52.5°	250.5	253.8	252.7	253.8	252.7	254.9	253.8	254.9
55°	220.4	222.7	223.8	224.9	224.9	224.9	224.9	224.9
57.5°	192.6	195.9	197.1	198.2	198.2	200.4	198.2	198.2
60°	170.3	173.7	174.8	175.9	175.9	177.0	174.8	175.9
62.5°	150.3	153.6	153.6	154.8	154.8	154.8	152.5	153.6
65°	130.3	131.4	132.5	132.5	131.4	131.4	130.3	131.4
67.5°	108.0	109.1	108.0	108.0	106.9	106.9	104.7	105.8
70°	83.5	83.5	84.6	83.5	82.4	83.5	82.4	81.3
72.5°	62.3	62.3	62.3	61.2	61.2	60.1	61.2	61.2
75°	42.3	42.3	43.4	43.4	43.4	43.4	42.3	42.3
77.5°	27.8	27.8	27.8	27.8	28.9	27.8	27.8	27.8
80°	17.8	17.8	18.9	18.9	17.8	17.8	17.8	17.8
82.5°	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1
85°	6.7	6.7	6.7	6.7	5.6	5.6	5.6	5.6
87.5°	3.3	3.3	3.3	3.3	3.3	3.3	2.2	2.2
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)