

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: P252674

Luminaire Tested: **LD6B20D010 EU6B10208027 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252674
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 EU6B10208027 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1820.0 lumens
Efficiency: N/A
Efficacy: 87.5 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

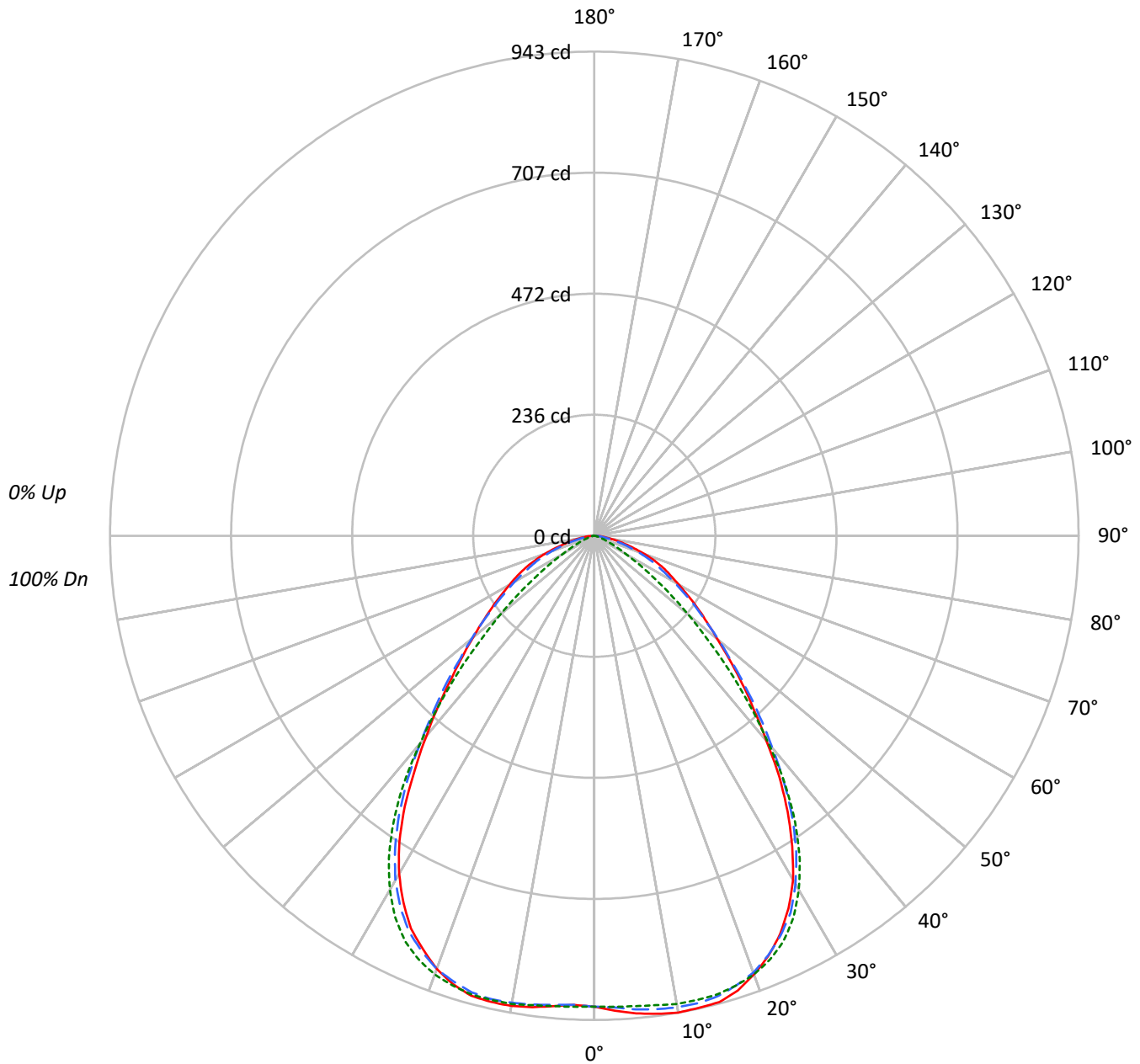
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	59826	59826	59826
5°	61154	60218	60218
10°	62464	61345	61603
15°	63510	62456	62632
20°	63124	63124	62311
25°	61619	62742	60777
30°	58331	59988	57253
35°	52270	54333	51235
40°	44405	44959	43298
45°	37570	34341	36260
50°	31728	24217	31332
55°	27879	15640	27583
60°	24713	9303	24883
65°	22832	5604	22832
70°	19800	3224	19304
75°	15704	1966	14721
80°	11684	1465	11196
85°	10704	973	9731



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.3	4.9
10°-20°	261.3	14.4
20°-30°	392.9	21.6
30°-40°	413.1	22.7
40°-50°	308.6	17.0
50°-60°	192.1	10.6
60°-70°	109.3	6.0
70°-80°	45.0	2.5
80°-90°	9.3	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°	742.5	40.8
0°-40°	1155.6	63.5
0°-60°	1656.4	91.0
0°-90°	1820.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1820.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	917	917	917	917	917	
5°	934	926	920	917	920	89
15°	940	929	925	921	927	264
25°	856	859	872	852	844	392
35°	656	673	682	663	643	407
45°	407	416	372	408	393	316
55°	245	240	138	236	242	220
65°	148	132	36	132	148	146
75°	62	49	8	48	58	68
85°	14	9	1	8	13	16
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°	917.0	917.0	917.0	917.0	917.0	917.0	917.0	917.0	917.0	917.0	917.0
2.5°	926.0	924.7	926.0	923.4	922.1	922.1	923.4	920.8	919.5	920.8	919.5
5°	933.8	931.2	932.5	931.2	928.6	928.6	929.9	926.0	926.0	927.3	926.0
7.5°	939.0	939.0	939.0	936.4	935.1	933.8	936.4	932.5	931.2	931.2	929.9
10°	942.9	941.6	942.9	940.3	937.7	936.4	939.0	936.4	933.8	936.4	932.5
12.5°	941.6	941.6	941.6	940.3	937.7	936.4	939.0	935.1	933.8	935.1	932.5
15°	940.3	936.4	937.7	936.4	932.5	932.5	933.8	929.9	927.3	931.2	928.6
17.5°	928.6	926.0	927.3	924.7	922.1	920.8	922.1	920.8	918.3	920.8	918.3
20°	909.2	909.2	910.5	907.9	905.3	904.0	906.6	904.0	901.4	905.3	905.3
22.5°	885.8	885.8	885.8	884.5	883.2	883.2	883.2	881.9	880.6	883.2	884.5
25°	856.0	854.7	856.0	857.3	856.0	854.7	856.0	856.0	853.4	858.6	858.6
27.5°	818.4	818.4	821.0	819.7	819.7	818.4	821.0	821.0	819.7	823.6	827.5
30°	774.3	771.7	774.3	774.3	775.6	775.6	776.9	776.9	776.9	780.8	783.4
32.5°	717.2	718.5	722.4	721.1	719.8	723.7	723.7	726.3	727.6	730.2	731.5
35°	656.3	657.6	657.6	658.9	661.5	658.9	665.3	664.0	665.3	670.5	673.1
37.5°	591.4	587.5	594.0	591.4	592.7	592.7	595.3	596.6	600.5	607.0	607.0
40°	521.4	522.7	525.3	526.6	527.9	527.9	527.9	531.8	533.1	540.8	539.5
42.5°	460.4	460.4	463.0	464.3	464.3	464.3	464.3	468.2	470.8	473.4	476.0
45°	407.2	403.4	406.0	406.0	408.5	407.2	409.8	412.4	413.7	417.6	416.3
47.5°	356.7	355.4	356.7	358.0	356.7	358.0	359.3	360.6	361.9	361.9	361.9
50°	312.6	312.6	313.9	315.2	315.2	315.2	315.2	316.5	316.5	319.1	316.5
52.5°	276.3	277.6	277.6	276.3	277.6	277.6	278.8	278.8	277.6	277.6	273.7
55°	245.1	243.8	245.1	243.8	245.1	245.1	243.8	243.8	242.5	241.2	239.9
57.5°	215.3	215.3	215.3	215.3	214.0	215.3	214.0	212.7	212.7	210.1	206.2
60°	189.4	189.4	189.4	189.4	189.4	188.1	189.4	188.1	185.5	182.9	177.7
62.5°	167.3	166.0	167.3	166.0	166.0	164.7	164.7	163.4	160.8	158.2	153.0
65°	147.9	149.2	147.9	147.9	146.6	145.3	145.3	144.0	140.1	137.5	132.3
67.5°	127.1	125.8	125.8	125.8	124.5	124.5	124.5	121.9	119.3	115.4	110.2
70°	103.8	103.8	103.8	102.5	102.5	101.2	101.2	99.9	97.3	94.7	88.2
72.5°	81.7	81.7	81.7	79.1	80.4	79.1	79.1	76.5	75.2	71.3	67.4
75°	62.3	62.3	61.0	61.0	59.7	58.4	58.4	57.1	55.8	53.2	49.3
77.5°	45.4	45.4	45.4	44.1	42.8	41.5	41.5	40.2	38.9	37.6	35.0
80°	31.1	31.1	31.1	31.1	29.8	28.5	28.5	27.2	27.2	25.9	23.3
82.5°	20.8	20.8	20.8	20.8	19.5	19.5	19.5	18.2	16.9	16.9	14.3
85°	14.3	14.3	13.0	13.0	13.0	13.0	11.7	11.7	10.4	9.1	9.1
87.5°	7.8	7.8	7.8	7.8	6.5	6.5	6.5	6.5	5.2	5.2	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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	917.0	917.0	917.0	917.0	917.0	917.0	917.0	917.0	917.0	917.0	917.0
2.5°	923.4	923.4	922.1	918.3	919.5	918.3	919.5	918.3	914.4	918.3	914.4
5°	928.6	929.9	927.3	922.1	923.4	922.1	922.1	920.8	917.0	919.5	917.0
7.5°	933.8	932.5	931.2	926.0	927.3	926.0	926.0	923.4	919.5	922.1	918.3
10°	936.4	936.4	933.8	928.6	928.6	927.3	928.6	927.3	922.1	926.0	923.4
12.5°	936.4	935.1	935.1	928.6	929.9	928.6	929.9	927.3	923.4	926.0	924.7
15°	932.5	932.5	931.2	924.7	926.0	926.0	927.3	924.7	920.8	924.7	922.1
17.5°	924.7	924.7	923.4	918.3	920.8	920.8	922.1	919.5	915.7	918.3	918.3
20°	909.2	910.5	910.5	906.6	909.2	909.2	910.5	909.2	907.9	909.2	906.6
22.5°	891.0	893.6	893.6	889.7	892.3	892.3	896.2	894.9	892.3	893.6	892.3
25°	863.8	866.4	869.0	866.4	869.0	869.0	872.9	871.6	869.0	871.6	867.7
27.5°	832.7	833.9	836.5	833.9	837.8	836.5	840.4	839.1	835.2	839.1	837.8
30°	788.6	793.7	797.6	793.7	797.6	797.6	800.2	798.9	797.6	796.3	796.3
32.5°	739.3	744.5	744.5	743.2	745.8	745.8	747.1	744.5	743.2	744.5	745.8
35°	678.3	680.9	683.5	682.2	683.5	684.8	683.5	684.8	680.9	682.2	682.2
37.5°	612.2	614.8	614.8	610.9	613.5	613.5	610.9	610.9	608.3	610.9	605.7
40°	542.1	539.5	540.8	538.2	535.6	535.6	534.3	529.2	526.6	527.9	529.2
42.5°	473.4	473.4	469.5	463.0	456.5	456.5	452.6	450.0	444.9	447.5	446.2
45°	415.0	408.5	403.4	393.0	389.1	386.5	380.0	373.5	370.9	372.2	370.9
47.5°	359.3	354.1	341.1	326.8	322.9	319.1	311.3	303.5	300.9	298.3	298.3
50°	312.6	303.5	289.2	273.7	267.2	260.7	250.3	242.5	237.3	238.6	238.6
52.5°	269.8	259.4	242.5	223.1	215.3	207.5	198.4	189.4	185.5	184.2	184.2
55°	232.2	220.5	203.6	181.6	175.1	166.0	154.3	144.0	138.8	137.5	140.1
57.5°	198.4	188.1	168.6	146.6	138.8	129.7	118.0	108.9	102.5	101.2	102.5
60°	171.2	156.9	140.1	119.3	108.9	101.2	88.2	80.4	73.9	71.3	72.6
62.5°	144.0	131.0	114.1	93.4	85.6	77.8	66.1	57.1	51.9	50.6	51.9
65°	123.2	110.2	94.7	76.5	68.7	61.0	50.6	41.5	37.6	36.3	37.6
67.5°	102.5	90.8	77.8	61.0	54.5	48.0	37.6	31.1	25.9	24.6	25.9
70°	83.0	72.6	59.7	48.0	41.5	36.3	28.5	22.0	18.2	16.9	18.2
72.5°	62.3	54.5	45.4	35.0	31.1	27.2	20.8	15.6	13.0	11.7	13.0
75°	45.4	38.9	32.4	24.6	22.0	19.5	14.3	10.4	9.1	7.8	9.1
77.5°	31.1	27.2	22.0	16.9	14.3	13.0	9.1	7.8	6.5	5.2	5.2
80°	20.8	18.2	14.3	11.7	10.4	9.1	6.5	5.2	3.9	3.9	3.9
82.5°	13.0	10.4	9.1	6.5	5.2	5.2	3.9	2.6	2.6	2.6	2.6
85°	7.8	6.5	5.2	3.9	2.6	2.6	1.3	1.3	1.3	1.3	1.3
87.5°	3.9	2.6	2.6	1.3	1.3	1.3	1.3	1.3	0.0	0.0	1.3
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	917.0	917.0	917.0	917.0	917.0	917.0	917.0	917.0	917.0	917.0	917.0
2.5°	917.0	914.4	914.4	915.7	917.0	918.3	915.7	914.4	914.4	918.3	915.7
5°	917.0	915.7	915.7	915.7	918.3	919.5	917.0	915.7	917.0	920.8	919.5
7.5°	920.8	918.3	919.5	919.5	920.8	923.4	920.8	919.5	920.8	924.7	922.1
10°	923.4	920.8	922.1	920.8	924.7	926.0	923.4	922.1	923.4	928.6	927.3
12.5°	924.7	923.4	923.4	922.1	926.0	927.3	924.7	923.4	924.7	928.6	927.3
15°	922.1	920.8	920.8	920.8	923.4	926.0	922.1	920.8	920.8	924.7	923.4
17.5°	917.0	914.4	914.4	914.4	915.7	917.0	913.1	911.8	910.5	914.4	913.1
20°	907.9	905.3	902.7	902.7	904.0	904.0	901.4	897.5	897.5	898.8	896.2
22.5°	891.0	889.7	887.1	885.8	888.4	887.1	881.9	878.0	876.7	878.0	875.5
25°	867.7	865.1	863.8	862.5	863.8	862.5	857.3	852.1	852.1	852.1	848.2
27.5°	835.2	832.7	831.4	831.4	832.7	830.1	824.9	819.7	817.1	817.1	813.2
30°	793.7	793.7	792.4	791.1	789.9	789.9	782.1	776.9	774.3	775.6	773.0
32.5°	743.2	741.9	740.6	736.7	738.0	736.7	730.2	726.3	722.4	719.8	718.5
35°	678.3	678.3	677.0	677.0	677.0	675.7	669.2	665.3	662.7	661.5	657.6
37.5°	607.0	605.7	604.4	604.4	604.4	604.4	600.5	596.6	596.6	595.3	592.7
40°	526.6	527.9	529.2	527.9	531.8	535.6	530.5	527.9	526.6	530.5	525.3
42.5°	448.8	447.5	453.9	455.2	455.2	461.7	463.0	464.3	463.0	465.6	465.6
45°	373.5	372.2	378.7	381.3	387.8	395.6	399.5	406.0	408.5	411.1	408.5
47.5°	302.2	307.4	312.6	319.1	324.2	337.2	345.0	351.5	354.1	358.0	358.0
50°	242.5	247.7	256.8	262.0	268.5	284.0	297.0	306.1	311.3	315.2	313.9
52.5°	186.8	195.8	207.5	212.7	221.8	239.9	254.2	264.6	271.1	275.0	276.3
55°	144.0	151.7	163.4	171.2	180.3	199.7	217.9	229.6	236.0	241.2	243.8
57.5°	106.4	115.4	128.4	134.9	145.3	167.3	182.9	197.1	204.9	211.4	212.7
60°	77.8	86.9	98.6	106.4	116.7	138.8	156.9	169.9	179.0	184.2	186.8
62.5°	55.8	64.8	76.5	84.3	93.4	112.8	131.0	144.0	153.0	159.5	163.4
65°	40.2	49.3	61.0	67.4	75.2	93.4	110.2	123.2	132.3	140.1	142.7
67.5°	29.8	36.3	46.7	53.2	61.0	75.2	89.5	101.2	110.2	116.7	119.3
70°	22.0	27.2	36.3	40.2	45.4	58.4	70.0	80.4	88.2	93.4	96.0
72.5°	15.6	19.5	25.9	29.8	33.7	44.1	53.2	61.0	66.1	71.3	73.9
75°	10.4	13.0	18.2	20.8	23.3	31.1	37.6	44.1	48.0	51.9	53.2
77.5°	6.5	9.1	13.0	14.3	16.9	20.8	25.9	29.8	32.4	35.0	37.6
80°	3.9	5.2	7.8	9.1	10.4	14.3	16.9	19.5	22.0	24.6	25.9
82.5°	2.6	3.9	5.2	5.2	6.5	7.8	10.4	13.0	14.3	15.6	16.9
85°	1.3	1.3	2.6	2.6	3.9	3.9	5.2	6.5	7.8	9.1	10.4
87.5°	1.3	1.3	1.3	1.3	2.6	2.6	3.9	3.9	3.9	5.2	5.2
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°	917.0	917.0	917.0	917.0	917.0	917.0	917.0	917.0
2.5°	913.1	917.0	913.1	915.7	914.4	914.4	913.1	914.4
5°	917.0	922.1	917.0	920.8	918.3	918.3	918.3	919.5
7.5°	920.8	926.0	922.1	926.0	924.7	923.4	923.4	926.0
10°	924.7	928.6	926.0	929.9	928.6	927.3	927.3	929.9
12.5°	924.7	929.9	927.3	931.2	929.9	928.6	928.6	929.9
15°	920.8	927.3	923.4	927.3	926.0	924.7	924.7	927.3
17.5°	909.2	914.4	911.8	914.4	914.4	913.1	914.4	915.7
20°	893.6	897.5	894.9	897.5	897.5	894.9	896.2	897.5
22.5°	871.6	875.5	872.9	875.5	874.2	872.9	872.9	871.6
25°	844.3	849.5	845.6	848.2	845.6	843.0	843.0	844.3
27.5°	810.6	814.5	809.3	811.9	809.3	806.7	806.7	805.4
30°	766.5	767.8	763.9	766.5	763.9	762.6	760.0	760.0
32.5°	713.3	714.6	710.7	710.7	708.1	708.1	703.0	706.8
35°	651.1	652.4	651.1	649.8	645.9	644.6	643.3	643.3
37.5°	586.2	586.2	582.3	581.0	578.4	575.9	577.1	573.3
40°	520.1	518.8	514.9	516.2	514.9	511.0	509.7	508.4
42.5°	457.8	457.8	453.9	455.2	452.6	451.3	447.5	448.8
45°	403.4	403.4	399.5	399.5	398.2	394.3	395.6	393.0
47.5°	354.1	354.1	352.8	352.8	348.9	347.6	347.6	347.6
50°	311.3	311.3	311.3	311.3	310.0	308.7	307.4	308.7
52.5°	275.0	277.6	276.3	276.3	275.0	273.7	272.4	272.4
55°	242.5	243.8	243.8	245.1	243.8	242.5	243.8	242.5
57.5°	214.0	216.6	216.6	216.6	216.6	216.6	215.3	214.0
60°	189.4	190.7	190.7	192.0	192.0	192.0	190.7	190.7
62.5°	164.7	167.3	168.6	168.6	169.9	168.6	168.6	168.6
65°	145.3	147.9	149.2	147.9	149.2	149.2	147.9	147.9
67.5°	121.9	124.5	124.5	124.5	124.5	125.8	124.5	124.5
70°	98.6	101.2	99.9	101.2	101.2	101.2	101.2	101.2
72.5°	75.2	76.5	77.8	77.8	79.1	77.8	77.8	77.8
75°	54.5	57.1	57.1	57.1	57.1	58.4	58.4	58.4
77.5°	38.9	40.2	40.2	41.5	41.5	41.5	41.5	42.8
80°	27.2	27.2	28.5	28.5	29.8	29.8	29.8	29.8
82.5°	18.2	19.5	19.5	19.5	19.5	19.5	19.5	19.5
85°	10.4	11.7	11.7	11.7	11.7	13.0	13.0	13.0
87.5°	6.5	6.5	6.5	6.5	6.5	6.5	5.2	5.2
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)