

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: P252151

Luminaire Tested: **LD6B15D010 EU6B10209050 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252151
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-1)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B15D010 EU6B10209050 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1626.0 lumens
Efficiency: N/A
Efficacy: 113.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

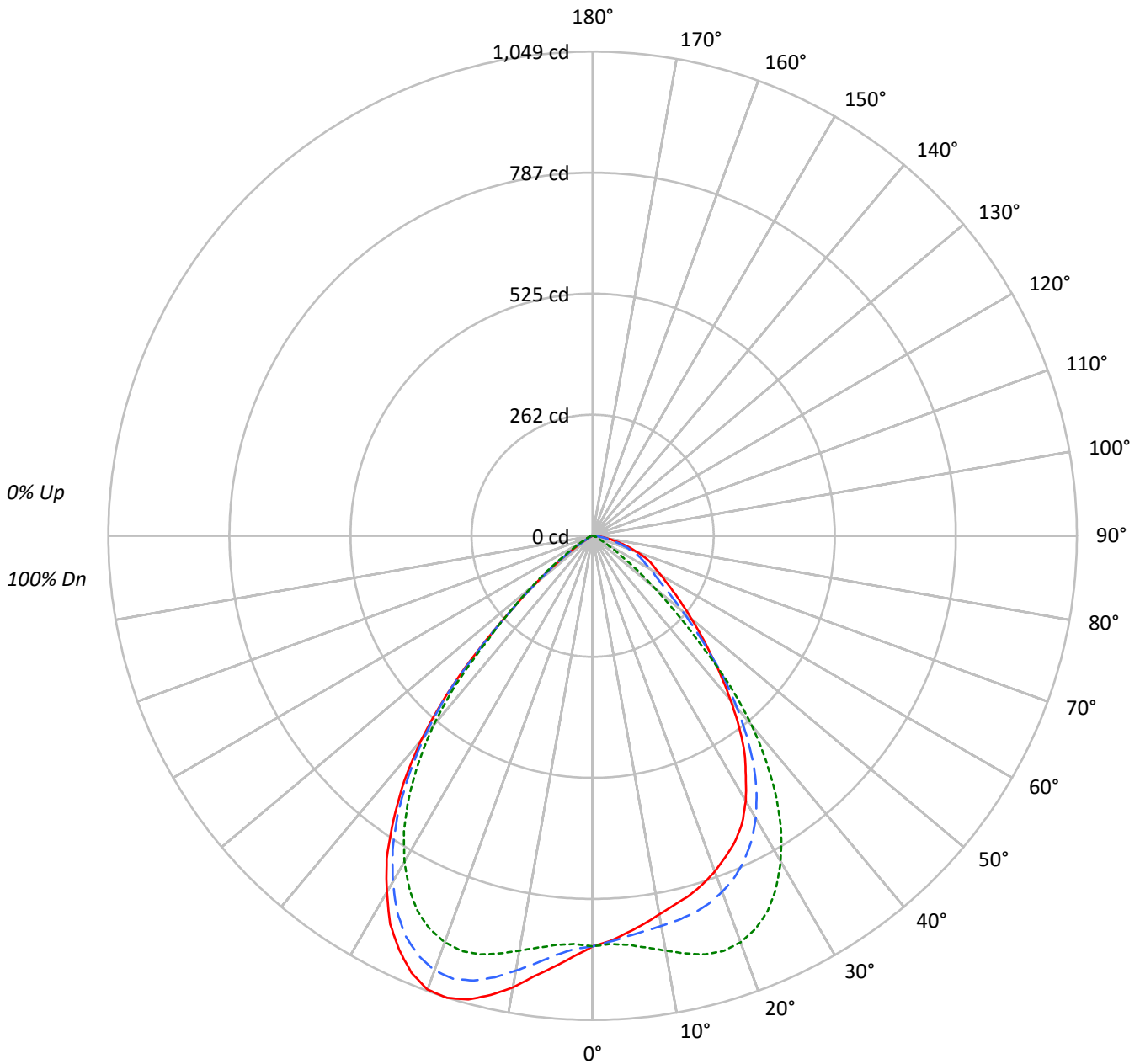
Input Watts (W): 14.39
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90																			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80																			
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72																			
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65																			
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58																			
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53																			
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	50	48																			
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44																			
9	66	54	47	42	64	54	47	42	53	46	42	52	46	42	51	45	42	40																			
10	62	50	43	39	61	50	43	39	49	43	39	48	42	39	47	42	38	37																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	58038	58038	58038
5°	56531	58260	61318
10°	55157	60450	65803
15°	54513	63415	70251
20°	53730	65068	72621
25°	52585	64585	71323
30°	49969	61374	67145
35°	45716	55337	59940
40°	39542	45700	49175
45°	33344	29977	32173
50°	28307	17346	16310
55°	24569	8315	6290
60°	22195	3888	1553
65°	21535	2238	525
70°	19304	1793	496
75°	15855	1286	227
80°	11835	639	0
85°	10180	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.9	5.3
10°-20°	261.9	16.1
20°-30°	400.1	24.6
30°-40°	418.5	25.7
40°-50°	271.5	16.7
50°-60°	107.8	6.6
60°-70°	51.1	3.1
70°-80°	24.3	1.5
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°	747.9	46.0
0°-40°	1166.3	71.7
0°-60°	1545.6	95.1
0°-90°	1626.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1626.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	890	890	890	890	890	
5°	863	871	890	912	936	82
15°	807	846	939	998	1040	227
25°	730	776	897	958	991	335
35°	574	609	695	736	753	355
45°	361	358	325	344	349	281
55°	216	184	73	57	55	196
65°	140	116	14	3	3	136
75°	63	51	5	2	1	68
85°	14	8	0	0	0	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°	889.6	889.6	889.6	889.6	889.6	889.6	889.6	889.6	889.6	889.6	889.6
2.5°	878.5	880.2	870.8	868.3	875.1	877.6	878.5	875.9	876.8	880.2	880.2
5°	863.2	864.9	856.4	853.8	860.6	862.3	864.9	864.0	866.6	871.7	870.8
7.5°	848.7	851.3	841.9	838.5	847.0	851.3	853.0	853.0	856.4	863.2	864.0
10°	832.6	836.0	827.5	825.8	835.1	839.4	840.2	841.9	847.0	856.4	858.1
12.5°	819.0	822.4	816.4	813.9	824.1	828.3	830.0	833.4	839.4	851.3	853.0
15°	807.1	809.6	802.8	801.1	811.3	816.4	817.3	822.4	830.0	843.6	846.2
17.5°	791.8	793.5	788.3	786.6	796.9	802.0	802.8	808.8	818.1	831.7	836.0
20°	773.9	775.6	770.5	768.8	779.0	784.9	785.8	790.9	802.0	816.4	820.7
22.5°	752.6	756.0	750.1	748.4	758.6	763.7	766.2	770.5	781.5	796.0	802.0
25°	730.5	730.5	726.3	725.4	734.8	740.7	739.9	745.8	756.9	771.3	776.4
27.5°	701.6	700.8	696.5	695.7	705.9	711.0	709.3	715.2	725.4	739.9	745.0
30°	663.3	665.0	659.1	657.4	665.9	674.4	673.5	679.5	689.7	703.3	706.7
32.5°	617.4	619.1	618.3	615.7	623.4	627.6	630.2	634.4	642.9	657.4	660.8
35°	574.0	571.5	568.1	568.1	575.7	582.5	580.0	585.1	593.6	608.1	608.9
37.5°	520.5	519.6	517.9	516.2	524.7	526.4	527.3	530.7	538.3	550.2	548.5
40°	464.3	465.2	464.3	460.9	466.0	472.8	472.0	473.7	480.5	489.0	486.4
42.5°	411.6	411.6	411.6	408.2	414.2	417.6	419.3	418.4	420.1	427.8	424.4
45°	361.4	362.3	361.4	360.6	361.4	363.1	361.4	360.6	360.6	363.1	358.0
47.5°	318.1	318.1	315.5	313.0	315.5	316.4	313.8	311.3	310.4	309.6	301.1
50°	278.9	278.1	277.2	273.0	275.5	276.4	273.0	271.3	267.9	263.6	253.4
52.5°	244.9	244.1	243.2	239.0	240.7	241.5	238.1	234.7	230.5	227.1	214.3
55°	216.0	215.2	215.2	212.6	210.9	212.6	209.2	206.7	200.7	196.4	183.7
57.5°	191.3	191.3	189.6	187.1	187.9	187.9	184.5	181.1	176.0	170.9	160.7
60°	170.1	170.1	170.1	167.5	167.5	167.5	165.8	162.4	158.2	153.1	142.9
62.5°	153.1	153.1	152.2	149.7	150.5	150.5	148.8	145.4	141.2	137.8	127.6
65°	139.5	139.5	139.5	136.9	136.9	137.8	136.1	132.7	129.3	125.0	115.7
67.5°	122.5	121.6	121.6	119.9	120.8	121.6	119.9	117.4	113.1	110.6	102.1
70°	101.2	102.1	102.9	100.4	101.2	101.2	100.4	97.8	95.2	92.7	85.0
72.5°	82.5	82.5	81.6	80.8	80.8	81.6	79.9	77.4	75.7	74.0	68.0
75°	62.9	62.1	62.9	61.2	61.2	61.2	59.5	58.7	57.8	55.3	51.0
77.5°	45.9	45.1	45.1	43.4	44.2	44.2	43.4	41.7	40.0	39.1	35.7
80°	31.5	31.5	31.5	30.6	30.6	29.8	29.8	28.9	27.2	26.4	24.7
82.5°	21.3	21.3	21.3	20.4	20.4	20.4	19.6	18.7	17.9	17.0	15.3
85°	13.6	13.6	13.6	12.8	12.8	12.8	11.9	11.9	11.1	10.2	8.5
87.5°	7.7	7.7	7.7	6.8	6.8	6.8	6.8	6.8	6.0	5.1	4.3
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	889.6	889.6	889.6	889.6	889.6	889.6	889.6	889.6	889.6	889.6	889.6
2.5°	886.1	874.2	881.9	881.9	879.3	886.1	890.4	893.8	893.0	885.3	884.4
5°	879.3	869.1	877.6	878.5	875.9	885.3	891.3	895.5	896.4	889.6	890.4
7.5°	874.2	865.7	876.8	880.2	879.3	887.8	894.7	901.5	904.9	899.8	900.6
10°	871.7	864.9	876.8	881.9	882.7	892.1	902.3	911.7	915.9	912.5	915.1
12.5°	868.3	864.0	877.6	885.3	888.7	898.1	910.8	921.9	928.7	927.0	932.1
15°	864.9	861.5	877.6	888.7	893.0	901.5	915.9	932.1	939.7	938.9	945.7
17.5°	856.4	855.5	872.5	884.4	890.4	900.6	914.2	933.8	941.4	943.1	951.6
20°	842.8	842.8	861.5	874.2	881.0	890.4	907.4	926.1	935.5	937.2	946.5
22.5°	824.1	825.8	843.6	856.4	866.6	873.4	891.3	910.8	919.3	921.9	932.1
25°	799.4	801.1	818.1	830.9	841.9	849.6	866.6	884.4	894.7	897.2	904.9
27.5°	767.1	770.5	786.6	799.4	808.8	813.9	831.7	850.4	858.1	860.6	868.3
30°	729.7	730.5	746.7	757.7	767.1	771.3	786.6	806.2	812.2	814.7	825.8
32.5°	683.7	682.9	698.2	708.4	716.1	721.2	737.3	750.1	756.0	760.3	766.2
35°	628.5	627.6	638.7	650.6	656.5	658.2	674.4	688.0	691.4	694.8	702.5
37.5°	566.4	566.4	575.7	581.7	588.5	591.0	598.7	614.0	620.0	619.1	625.1
40°	500.9	497.5	504.3	510.3	512.0	512.8	520.5	532.4	536.6	536.6	540.9
42.5°	432.0	426.9	427.8	431.2	432.9	426.9	432.0	439.7	437.1	440.5	441.4
45°	358.9	351.2	347.8	340.2	341.9	335.9	332.5	334.2	333.4	324.9	326.6
47.5°	299.4	285.7	279.8	268.7	266.2	259.4	255.1	247.5	240.7	240.7	236.4
50°	249.2	235.6	223.7	210.9	206.7	200.7	191.3	181.1	176.0	170.9	166.7
52.5°	209.2	194.7	180.3	166.7	160.7	153.1	140.3	130.1	120.8	115.7	110.6
55°	176.9	160.7	145.4	131.0	123.3	115.7	102.9	91.0	79.9	73.1	68.9
57.5°	152.2	136.9	120.8	105.5	98.6	90.1	76.5	63.8	53.6	45.9	41.7
60°	134.4	119.1	104.6	88.4	81.6	73.1	58.7	46.8	36.6	29.8	24.7
62.5°	119.1	105.5	90.1	75.7	68.9	60.4	46.8	34.9	25.5	18.7	14.5
65°	108.0	94.4	81.6	67.2	61.2	52.7	40.0	28.9	20.4	14.5	10.2
67.5°	95.2	83.3	70.6	58.7	52.7	45.9	34.0	24.7	17.0	11.9	8.5
70°	79.9	70.6	59.5	48.5	44.2	38.3	28.1	20.4	13.6	9.4	6.8
72.5°	63.8	56.1	47.6	39.1	35.7	29.8	23.0	16.2	10.2	6.8	5.1
75°	48.5	42.5	35.7	29.8	26.4	23.0	17.0	11.9	7.7	5.1	3.4
77.5°	33.2	30.6	25.5	20.4	18.7	16.2	11.1	7.7	5.1	3.4	1.7
80°	23.0	20.4	17.0	13.6	11.9	10.2	6.8	5.1	2.6	1.7	0.9
82.5°	14.5	11.9	10.2	8.5	7.7	6.0	4.3	2.6	1.7	0.9	0.9
85°	7.7	6.8	6.0	4.3	4.3	3.4	2.6	1.7	0.9	0.0	0.0
87.5°	4.3	3.4	2.6	1.7	1.7	0.9	0.9	0.9	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°	889.6	889.6	889.6	889.6	889.6	889.6	889.6	889.6	889.6	889.6	889.6
2.5°	894.7	894.7	893.8	904.0	892.1	904.0	898.1	904.0	895.5	894.7	895.5
5°	901.5	904.0	904.9	914.2	903.2	917.6	912.5	917.6	911.7	913.4	915.9
7.5°	915.1	919.3	918.5	930.4	919.3	935.5	932.1	939.7	933.8	935.5	938.9
10°	930.4	935.5	936.3	948.2	938.0	957.6	953.3	961.8	956.7	959.3	963.5
12.5°	948.2	954.2	955.0	968.6	957.6	978.0	975.4	983.9	979.7	982.2	987.3
15°	961.8	970.3	972.0	985.6	973.7	995.0	993.3	1004.4	997.6	1001.8	1006.1
17.5°	968.6	976.3	979.7	992.5	982.2	1003.5	1001.8	1011.2	1006.1	1010.3	1015.4
20°	964.4	973.7	976.3	989.1	978.8	1000.1	997.6	1006.9	1001.8	1005.2	1010.3
22.5°	949.1	958.4	961.8	973.7	964.4	983.9	983.1	991.6	984.8	989.1	993.3
25°	921.9	932.1	933.8	944.8	934.6	955.0	953.3	962.7	957.6	960.1	966.1
27.5°	882.7	894.7	897.2	906.6	898.9	915.9	915.9	923.6	917.6	917.6	923.6
30°	836.0	847.9	849.6	857.2	850.4	865.7	866.6	874.2	864.9	870.0	870.8
32.5°	779.0	786.6	791.8	798.6	788.3	807.9	805.4	811.3	806.2	806.2	810.5
35°	710.1	719.5	722.0	730.5	722.0	737.3	737.3	740.7	735.6	735.6	742.4
37.5°	635.3	642.1	642.9	651.4	644.6	657.4	656.5	659.1	654.0	657.4	657.4
40°	547.7	552.8	554.5	558.7	557.9	567.2	566.4	568.1	565.5	566.4	568.1
42.5°	445.6	452.4	455.8	459.2	454.1	466.9	464.3	466.9	466.0	466.9	469.4
45°	328.3	333.4	335.9	336.8	335.1	342.7	348.7	343.6	344.4	342.7	346.1
47.5°	237.3	238.1	236.4	241.5	237.3	240.7	242.4	243.2	238.1	237.3	240.7
50°	162.4	166.7	160.7	163.3	162.4	165.8	164.1	165.0	159.9	162.4	160.7
52.5°	108.0	107.2	105.5	106.3	104.6	104.6	104.6	106.3	102.9	101.2	99.5
55°	65.5	63.8	60.4	59.5	59.5	60.4	58.7	57.0	57.0	56.1	56.1
57.5°	38.3	35.7	34.0	33.2	31.5	30.6	29.8	29.8	28.1	28.1	28.1
60°	21.3	18.7	17.0	15.3	15.3	14.5	13.6	12.8	12.8	12.8	11.9
62.5°	11.1	9.4	7.7	6.8	6.8	6.0	5.1	5.1	5.1	5.1	4.3
65°	7.7	6.0	5.1	4.3	4.3	3.4	3.4	3.4	3.4	3.4	3.4
67.5°	6.0	5.1	4.3	3.4	3.4	3.4	2.6	2.6	2.6	2.6	2.6
70°	5.1	3.4	3.4	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
72.5°	3.4	3.4	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
75°	2.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
77.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0
80°	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	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):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	889.6	889.6	889.6	889.6	889.6	889.6	889.6	889.6
2.5°	903.2	902.3	903.2	904.9	901.5	911.7	906.6	911.7
5°	922.7	923.6	924.4	927.0	922.7	935.5	928.7	936.3
7.5°	948.2	949.1	949.9	952.5	949.9	962.7	955.0	961.8
10°	974.6	976.3	976.3	980.5	978.0	989.9	984.8	993.3
12.5°	999.3	1001.0	1002.7	1005.2	1003.5	1016.3	1012.0	1018.8
15°	1018.8	1022.2	1023.1	1026.5	1024.8	1038.4	1033.3	1040.1
17.5°	1028.2	1031.6	1031.6	1035.8	1034.1	1048.6	1041.8	1049.4
20°	1023.1	1025.6	1026.5	1030.7	1029.0	1043.5	1036.7	1046.0
22.5°	1006.9	1007.8	1008.6	1012.9	1012.0	1024.8	1018.8	1024.8
25°	977.1	979.7	978.8	982.2	982.2	992.5	985.6	990.8
27.5°	934.6	937.2	937.2	941.4	938.0	948.2	941.4	949.1
30°	882.7	885.3	883.6	887.0	883.6	893.8	888.7	891.3
32.5°	820.7	820.7	821.5	822.4	820.7	830.0	824.9	830.0
35°	746.7	748.4	749.2	750.1	748.4	755.2	749.2	752.6
37.5°	663.3	667.6	666.7	667.6	665.0	673.5	668.4	670.1
40°	574.0	574.0	573.2	574.9	572.3	579.1	575.7	577.4
42.5°	470.3	472.8	469.4	473.7	466.9	476.2	472.8	470.3
45°	352.9	349.5	348.7	349.5	347.0	347.8	350.4	348.7
47.5°	240.7	240.7	239.0	236.4	239.8	240.7	237.3	237.3
50°	161.6	161.6	159.9	159.0	160.7	159.9	158.2	160.7
52.5°	102.9	99.5	99.5	101.2	99.5	97.8	100.4	98.6
55°	56.1	54.4	54.4	56.1	54.4	54.4	53.6	55.3
57.5°	27.2	28.1	27.2	27.2	27.2	27.2	26.4	27.2
60°	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9
62.5°	5.1	5.1	4.3	4.3	4.3	4.3	4.3	4.3
65°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
67.5°	2.6	2.6	2.6	2.6	2.6	3.4	2.6	2.6
70°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
72.5°	2.6	2.6	3.4	3.4	3.4	3.4	3.4	3.4
75°	1.7	1.7	1.7	0.9	0.9	0.9	0.9	0.9
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	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



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— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)