

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: P252150

Luminaire Tested: **LD6B15D010 EU6B10209040 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252150
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 EU6B10209040 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1620.0 lumens
Efficiency: N/A
Efficacy: 112.6 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

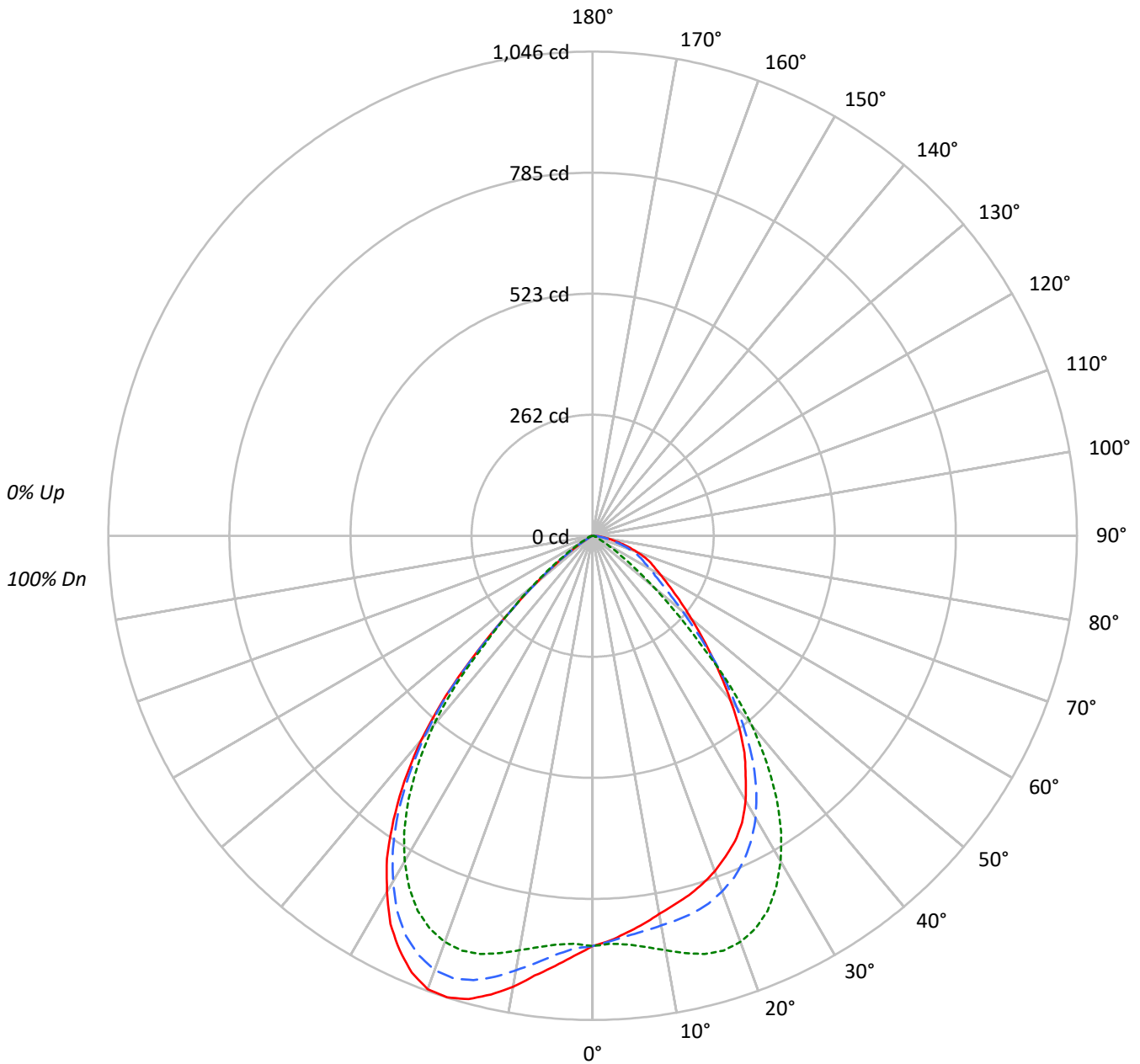
Input Watts (W): 14.39
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	43	39	47	42	38	37																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	57823	57823	57823
5°	56321	58044	61095
10°	54952	60225	65558
15°	54311	63179	69987
20°	53529	64825	72357
25°	52391	64347	71056
30°	49788	61148	66896
35°	45548	55130	59725
40°	39398	45530	48996
45°	33224	29866	32053
50°	28206	17285	16250
55°	24478	8292	6267
60°	22117	3875	1553
65°	21458	2223	525
70°	19228	1774	477
75°	15805	1286	202
80°	11760	639	0
85°	10180	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.6	5.3
10°-20°	260.9	16.1
20°-30°	398.6	24.6
30°-40°	416.9	25.7
40°-50°	270.5	16.7
50°-60°	107.4	6.6
60°-70°	50.9	3.1
70°-80°	24.2	1.5
80°-90°	4.9	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°	745.1	46.0
0°-40°	1162.0	71.7
0°-60°	1539.9	95.1
0°-90°	1620.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1620.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	886	886	886	886	886	
5°	860	868	886	908	933	81
15°	804	843	935	994	1036	227
25°	728	774	894	954	987	333
35°	572	607	692	733	750	354
45°	360	357	324	343	347	280
55°	215	183	73	57	55	195
65°	139	115	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°	886.3	886.3	886.3	886.3	886.3	886.3	886.3	886.3	886.3	886.3	886.3
2.5°	875.3	876.9	867.6	865.1	871.9	874.4	875.3	872.7	873.6	876.9	876.9
5°	860.0	861.7	853.2	850.7	857.5	859.2	861.7	860.8	863.4	868.5	867.6
7.5°	845.6	848.1	838.8	835.4	843.9	848.1	849.8	849.8	853.2	860.0	860.8
10°	829.5	832.9	824.4	822.7	832.0	836.3	837.1	838.8	843.9	853.2	854.9
12.5°	815.9	819.3	813.4	810.9	821.0	825.3	827.0	830.3	836.3	848.1	849.8
15°	804.1	806.6	799.8	798.1	808.3	813.4	814.2	819.3	827.0	840.5	843.1
17.5°	788.8	790.5	785.4	783.7	793.9	799.0	799.8	805.8	815.1	828.7	832.9
20°	771.0	772.7	767.6	766.0	776.1	782.1	782.9	788.0	799.0	813.4	817.6
22.5°	749.9	753.2	747.3	745.6	755.8	760.9	763.4	767.6	778.7	793.1	799.0
25°	727.8	727.8	723.6	722.7	732.1	738.0	737.1	743.1	754.1	768.5	773.6
27.5°	699.0	698.2	693.9	693.1	703.3	708.3	706.6	712.6	722.7	737.1	742.2
30°	660.9	662.6	656.7	655.0	663.4	671.9	671.1	677.0	687.2	700.7	704.1
32.5°	615.1	616.8	616.0	613.4	621.1	625.3	627.8	632.1	640.6	655.0	658.3
35°	571.9	569.4	566.0	566.0	573.6	580.4	577.9	582.9	591.4	605.8	606.7
37.5°	518.5	517.7	516.0	514.3	522.8	524.5	525.3	528.7	536.3	548.2	546.5
40°	462.6	463.5	462.6	459.2	464.3	471.1	470.2	471.9	478.7	487.2	484.7
42.5°	410.1	410.1	410.1	406.7	412.6	416.0	417.7	416.9	418.6	426.2	422.8
45°	360.1	360.9	360.1	359.3	360.1	361.8	360.1	359.3	359.3	361.8	356.7
47.5°	316.9	316.9	314.3	311.8	314.3	315.2	312.7	310.1	309.3	308.4	299.9
50°	277.9	277.1	276.2	272.0	274.5	275.4	272.0	270.3	266.9	262.7	252.5
52.5°	244.0	243.2	242.3	238.1	239.8	240.6	237.2	233.9	229.6	226.2	213.5
55°	215.2	214.4	214.4	211.8	210.1	211.8	208.4	205.9	200.0	195.7	183.0
57.5°	190.6	190.6	188.9	186.4	187.3	187.3	183.9	180.5	175.4	170.3	160.1
60°	169.5	169.5	169.5	166.9	166.9	166.9	165.2	161.8	157.6	152.5	142.3
62.5°	152.5	152.5	151.7	149.1	150.0	150.0	148.3	144.9	140.7	137.3	127.1
65°	139.0	139.0	139.0	136.4	136.4	137.3	135.6	132.2	128.8	124.6	115.2
67.5°	122.0	121.2	121.2	119.5	120.3	121.2	119.5	116.9	112.7	110.1	101.7
70°	100.8	101.7	102.5	100.0	100.8	100.8	100.0	97.4	94.9	92.4	84.7
72.5°	82.2	82.2	81.3	80.5	80.5	81.3	79.6	77.1	75.4	73.7	67.8
75°	62.7	61.9	62.7	61.0	61.0	61.0	59.3	58.5	57.6	55.1	50.8
77.5°	45.8	44.9	44.9	43.2	44.1	44.1	43.2	41.5	39.8	39.0	35.6
80°	31.3	31.3	31.3	30.5	30.5	29.7	29.7	28.8	27.1	26.3	24.6
82.5°	21.2	21.2	21.2	20.3	20.3	20.3	19.5	18.6	17.8	16.9	15.3
85°	13.6	13.6	13.6	12.7	12.7	12.7	11.9	11.9	11.0	10.2	8.5
87.5°	7.6	7.6	7.6	6.8	6.8	6.8	6.8	6.8	5.9	5.1	4.2
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°	886.3	886.3	886.3	886.3	886.3	886.3	886.3	886.3	886.3	886.3	886.3
2.5°	882.9	871.0	878.6	878.6	876.1	882.9	887.1	890.5	889.7	882.0	881.2
5°	876.1	865.9	874.4	875.3	872.7	882.0	888.0	892.2	893.0	886.3	887.1
7.5°	871.0	862.5	873.6	876.9	876.1	884.6	891.4	898.1	901.5	896.4	897.3
10°	868.5	861.7	873.6	878.6	879.5	888.8	899.0	908.3	912.5	909.1	911.7
12.5°	865.1	860.8	874.4	882.0	885.4	894.7	907.5	918.5	925.2	923.5	928.6
15°	861.7	858.3	874.4	885.4	889.7	898.1	912.5	928.6	936.3	935.4	942.2
17.5°	853.2	852.4	869.3	881.2	887.1	897.3	910.8	930.3	938.0	939.6	948.1
20°	839.7	839.7	858.3	871.0	877.8	887.1	904.1	922.7	932.0	933.7	943.0
22.5°	821.0	822.7	840.5	853.2	863.4	870.2	888.0	907.5	915.9	918.5	928.6
25°	796.5	798.1	815.1	827.8	838.8	846.4	863.4	881.2	891.4	893.9	901.5
27.5°	764.3	767.6	783.7	796.5	805.8	810.9	828.7	847.3	854.9	857.5	865.1
30°	727.0	727.8	743.9	754.9	764.3	768.5	783.7	803.2	809.2	811.7	822.7
32.5°	681.2	680.4	695.6	705.8	713.4	718.5	734.6	747.3	753.2	757.5	763.4
35°	626.1	625.3	636.3	648.2	654.1	655.8	671.9	685.5	688.8	692.2	699.9
37.5°	564.3	564.3	573.6	579.5	586.3	588.9	596.5	611.7	617.7	616.8	622.8
40°	499.1	495.7	502.4	508.4	510.1	510.9	518.5	530.4	534.6	534.6	538.9
42.5°	430.4	425.3	426.2	429.6	431.3	425.3	430.4	438.1	435.5	438.9	439.7
45°	357.6	349.9	346.5	338.9	340.6	334.7	331.3	333.0	332.1	323.7	325.4
47.5°	298.2	284.7	278.8	267.7	265.2	258.4	254.2	246.6	239.8	239.8	235.5
50°	248.3	234.7	222.8	210.1	205.9	200.0	190.6	180.5	175.4	170.3	166.1
52.5°	208.4	194.0	179.6	166.1	160.1	152.5	139.8	129.6	120.3	115.2	110.1
55°	176.2	160.1	144.9	130.5	122.9	115.2	102.5	90.7	79.6	72.9	68.6
57.5°	151.7	136.4	120.3	105.1	98.3	89.8	76.3	63.5	53.4	45.8	41.5
60°	133.9	118.6	104.2	88.1	81.3	72.9	58.5	46.6	36.4	29.7	24.6
62.5°	118.6	105.1	89.8	75.4	68.6	60.2	46.6	34.7	25.4	18.6	14.4
65°	107.6	94.0	81.3	66.9	61.0	52.5	39.8	28.8	20.3	14.4	10.2
67.5°	94.9	83.0	70.3	58.5	52.5	45.8	33.9	24.6	16.9	11.9	8.5
70°	79.6	70.3	59.3	48.3	44.1	38.1	28.0	20.3	13.6	9.3	6.8
72.5°	63.5	55.9	47.4	39.0	35.6	29.7	22.9	16.1	10.2	6.8	5.1
75°	48.3	42.4	35.6	29.7	26.3	22.9	16.9	11.9	7.6	5.1	3.4
77.5°	33.0	30.5	25.4	20.3	18.6	16.1	11.0	7.6	5.1	3.4	1.7
80°	22.9	20.3	16.9	13.6	11.9	10.2	6.8	5.1	2.5	1.7	0.8
82.5°	14.4	11.9	10.2	8.5	7.6	5.9	4.2	2.5	1.7	0.8	0.8
85°	7.6	6.8	5.9	4.2	4.2	3.4	2.5	1.7	0.8	0.0	0.0
87.5°	4.2	3.4	2.5	1.7	1.7	0.8	0.8	0.8	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°	886.3	886.3	886.3	886.3	886.3	886.3	886.3	886.3	886.3	886.3	886.3
2.5°	891.4	891.4	890.5	900.7	888.8	900.7	894.7	900.7	892.2	891.4	892.2
5°	898.1	900.7	901.5	910.8	899.8	914.2	909.1	914.2	908.3	910.0	912.5
7.5°	911.7	915.9	915.1	926.9	915.9	932.0	928.6	936.3	930.3	932.0	935.4
10°	926.9	932.0	932.9	944.7	934.6	954.1	949.8	958.3	953.2	955.7	960.0
12.5°	944.7	950.7	951.5	965.1	954.1	974.4	971.8	980.3	976.1	978.6	983.7
15°	958.3	966.8	968.5	982.0	970.1	991.3	989.6	1000.7	993.9	998.1	1002.3
17.5°	965.1	972.7	976.1	988.8	978.6	999.8	998.1	1007.4	1002.3	1006.6	1011.7
20°	960.8	970.1	972.7	985.4	975.2	996.4	993.9	1003.2	998.1	1001.5	1006.6
22.5°	945.6	954.9	958.3	970.1	960.8	980.3	979.5	987.9	981.2	985.4	989.6
25°	918.5	928.6	930.3	941.3	931.2	951.5	949.8	959.1	954.1	956.6	962.5
27.5°	879.5	891.4	893.9	903.2	895.6	912.5	912.5	920.2	914.2	914.2	920.2
30°	832.9	844.8	846.4	854.1	847.3	862.5	863.4	871.0	861.7	866.8	867.6
32.5°	776.1	783.7	788.8	795.6	785.4	804.9	802.4	808.3	803.2	803.2	807.5
35°	707.5	716.8	719.4	727.8	719.4	734.6	734.6	738.0	732.9	732.9	739.7
37.5°	632.9	639.7	640.6	649.0	642.2	655.0	654.1	656.7	651.6	655.0	655.0
40°	545.7	550.7	552.4	556.7	555.8	565.1	564.3	566.0	563.4	564.3	566.0
42.5°	444.0	450.8	454.1	457.5	452.5	465.2	462.6	465.2	464.3	465.2	467.7
45°	327.1	332.1	334.7	335.5	333.8	341.5	347.4	342.3	343.2	341.5	344.8
47.5°	236.4	237.2	235.5	240.6	236.4	239.8	241.5	242.3	237.2	236.4	239.8
50°	161.8	166.1	160.1	162.7	161.8	165.2	163.5	164.4	159.3	161.8	160.1
52.5°	107.6	106.8	105.1	105.9	104.2	104.2	104.2	105.9	102.5	100.8	99.1
55°	65.2	63.5	60.2	59.3	59.3	60.2	58.5	56.8	56.8	55.9	55.9
57.5°	38.1	35.6	33.9	33.0	31.3	30.5	29.7	29.7	28.0	28.0	28.0
60°	21.2	18.6	16.9	15.3	15.3	14.4	13.6	12.7	12.7	12.7	11.9
62.5°	11.0	9.3	7.6	6.8	6.8	5.9	5.1	5.1	5.1	5.1	4.2
65°	7.6	5.9	5.1	4.2	4.2	3.4	3.4	3.4	3.4	3.4	3.4
67.5°	5.9	5.1	4.2	3.4	3.4	3.4	2.5	2.5	2.5	2.5	2.5
70°	5.1	3.4	3.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
72.5°	3.4	3.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
75°	2.5	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
77.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0
80°	0.8	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°	886.3	886.3	886.3	886.3	886.3	886.3	886.3	886.3
2.5°	899.8	899.0	899.8	901.5	898.1	908.3	903.2	908.3
5°	919.3	920.2	921.0	923.5	919.3	932.0	925.2	932.9
7.5°	944.7	945.6	946.4	949.0	946.4	959.1	951.5	958.3
10°	971.0	972.7	972.7	976.9	974.4	986.2	981.2	989.6
12.5°	995.6	997.3	999.0	1001.5	999.8	1012.5	1008.3	1015.1
15°	1015.1	1018.4	1019.3	1022.7	1021.0	1034.5	1029.5	1036.2
17.5°	1024.4	1027.8	1027.8	1032.0	1030.3	1044.7	1037.9	1045.6
20°	1019.3	1021.8	1022.7	1026.9	1025.2	1039.6	1032.8	1042.2
22.5°	1003.2	1004.0	1004.9	1009.1	1008.3	1021.0	1015.1	1021.0
25°	973.5	976.1	975.2	978.6	978.6	988.8	982.0	987.1
27.5°	931.2	933.7	933.7	938.0	934.6	944.7	938.0	945.6
30°	879.5	882.0	880.3	883.7	880.3	890.5	885.4	888.0
32.5°	817.6	817.6	818.5	819.3	817.6	827.0	821.9	827.0
35°	743.9	745.6	746.5	747.3	745.6	752.4	746.5	749.9
37.5°	660.9	665.1	664.3	665.1	662.6	671.1	666.0	667.7
40°	571.9	571.9	571.1	572.8	570.2	577.0	573.6	575.3
42.5°	468.6	471.1	467.7	471.9	465.2	474.5	471.1	468.6
45°	351.6	348.2	347.4	348.2	345.7	346.5	349.1	347.4
47.5°	239.8	239.8	238.1	235.5	238.9	239.8	236.4	236.4
50°	161.0	161.0	159.3	158.4	160.1	159.3	157.6	160.1
52.5°	102.5	99.1	99.1	100.8	99.1	97.4	100.0	98.3
55°	55.9	54.2	54.2	55.9	54.2	54.2	53.4	55.1
57.5°	27.1	28.0	27.1	27.1	27.1	27.1	26.3	27.1
60°	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9
62.5°	5.1	5.1	4.2	4.2	4.2	4.2	4.2	4.2
65°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
67.5°	2.5	2.5	2.5	2.5	2.5	3.4	2.5	2.5
70°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
72.5°	2.5	2.5	3.4	3.4	3.4	3.4	3.4	3.4
75°	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8
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)