

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: P274433

Luminaire Tested: **LD6B20DE010W2N2050 EU6B1020W2N902050 6LBSW0LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P274433
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1808-906-18)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B20DE010W2N2050 EU6B1020W2N902050 6LBSW0LI
Description: PORTFOLIO 6" W2N RN DOWNLIGHT, SINGLE WALLWASH WITH SPECULAR FINISH
Light Source: W2N 2000K-5000K CCT TUNING RANGE
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1455.8 lumens
Efficiency: N/A
Efficacy: 52.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.16
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

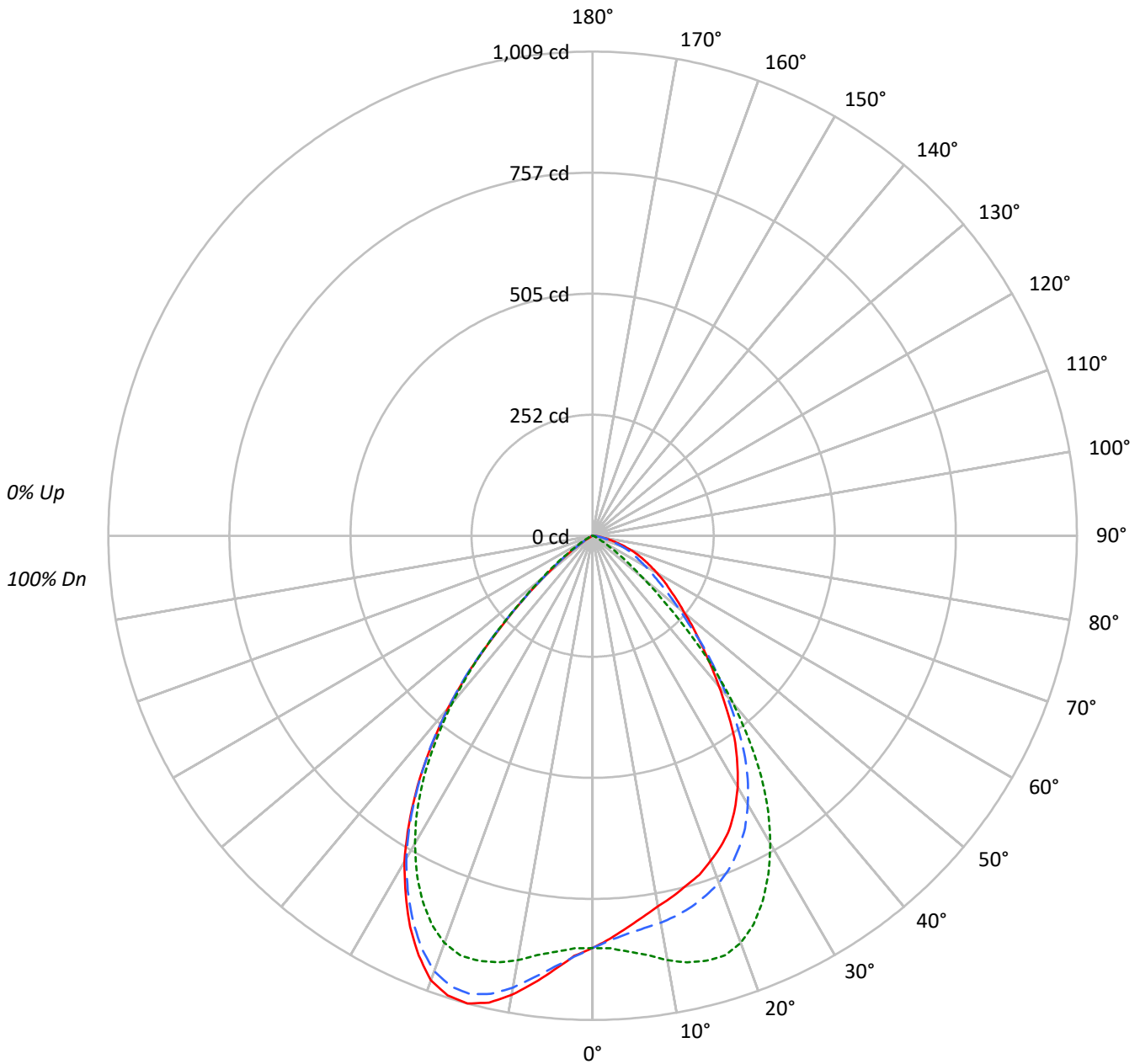
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	106	103	110	107	104	101	102	100	98	99	97	95	95	94	92	91																			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	85	83	81																			
3	98	90	84	79	96	89	83	78	86	81	77	83	79	76	81	78	75	73																			
4	92	82	76	70	90	81	75	70	79	73	69	77	72	68	75	71	67	66																			
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59																			
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54																			
7	75	64	57	52	74	63	57	52	62	56	51	61	55	51	60	55	51	49																			
8	71	59	52	47	69	59	52	47	58	51	47	57	51	47	55	50	47	45																			
9	67	55	48	44	65	55	48	43	54	48	43	53	47	43	52	47	43	41																			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	48	43	40	38																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	47096	47096	47096
5°	45124	47876	49939
10°	43648	49994	54079
15°	42815	52038	57265
20°	42009	52668	57498
25°	40817	50737	54420
30°	38265	46868	49634
35°	34499	40977	42543
40°	29283	32525	33534
45°	24824	21677	21188
50°	21313	11727	10524
55°	18809	5821	4330
60°	16950	2566	1031
65°	15190	1219	402
70°	13015	994	256
75°	9934	657	0
80°	6914	505	0
85°	5913	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.4	5.7
10°-20°	252.1	17.3
20°-30°	369.5	25.4
30°-40°	366.3	25.2
40°-50°	229.7	15.8
50°-60°	93.3	6.4
60°-70°	41.5	2.9
70°-80°	17.1	1.2
80°-90°	3.0	0.2
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°	705.0	48.4
0°-40°	1071.3	73.6
0°-60°	1394.2	95.8
0°-90°	1455.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1455.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	859	859	859	859	859	
5°	820	832	870	901	908	77
15°	754	800	917	989	1009	213
25°	675	720	839	886	900	308
35°	516	550	612	633	636	319
45°	320	325	280	280	273	249
55°	197	169	61	48	45	178
65°	117	95	9	3	3	116
75°	47	36	3	2	0	51
85°	9	5	0	0	0	11
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°	859.1	859.1	859.1	859.1	859.1	859.1	859.1	859.1	859.1	859.1	859.1
2.5°	840.3	838.8	838.8	840.3	840.3	840.3	840.3	841.9	841.9	843.5	843.5
5°	820.0	818.5	820.0	823.2	823.2	823.2	824.7	826.3	829.4	829.4	832.5
7.5°	801.3	801.3	804.4	806.0	807.5	807.5	807.5	812.2	815.4	821.6	824.7
10°	784.1	782.5	788.8	790.4	795.0	793.5	795.0	799.7	806.0	810.7	818.5
12.5°	770.1	770.1	774.7	774.7	779.4	782.5	781.0	788.8	793.5	801.3	810.7
15°	754.4	754.4	757.6	760.7	763.8	765.4	766.9	774.7	781.0	788.8	799.7
17.5°	740.4	737.3	740.4	743.5	748.2	748.2	752.9	757.6	766.9	774.7	785.7
20°	720.1	720.1	723.2	724.8	729.4	732.6	734.1	740.4	748.2	757.6	770.1
22.5°	699.8	699.8	702.9	704.5	709.1	710.7	712.3	720.1	726.3	735.7	748.2
25°	674.8	674.8	677.9	679.5	684.1	684.1	688.8	693.5	699.8	710.7	720.1
27.5°	642.0	645.1	645.1	648.2	651.3	652.9	656.0	660.7	667.0	676.3	687.3
30°	604.5	602.9	607.6	609.2	613.9	615.4	620.1	623.2	629.5	638.8	646.7
32.5°	560.7	563.9	565.4	567.0	570.1	571.7	574.8	579.5	585.7	592.0	601.4
35°	515.5	515.5	515.5	517.0	520.1	523.3	524.8	529.5	535.8	543.6	549.8
37.5°	460.8	462.3	465.5	465.5	470.2	471.7	473.3	478.0	484.2	488.9	492.0
40°	409.2	410.8	412.4	412.4	415.5	418.6	417.0	423.3	426.4	431.1	434.2
42.5°	362.4	360.8	365.5	367.1	367.1	370.2	371.7	373.3	374.9	378.0	378.0
45°	320.2	318.6	321.8	321.8	323.3	323.3	324.9	324.9	324.9	328.0	324.9
47.5°	284.3	281.2	282.7	282.7	281.2	282.7	282.7	281.2	279.6	276.5	271.8
50°	249.9	249.9	249.9	248.4	248.4	248.4	246.8	246.8	242.1	239.0	231.2
52.5°	221.8	221.8	221.8	220.2	217.1	218.7	218.7	214.0	210.9	206.2	198.4
55°	196.8	196.8	196.8	195.2	193.7	192.1	190.6	189.0	182.8	179.6	168.7
57.5°	176.5	173.4	173.4	173.4	170.3	170.3	168.7	164.0	159.3	154.6	146.8
60°	154.6	154.6	154.6	151.5	151.5	149.9	148.4	143.7	140.6	134.3	126.5
62.5°	134.3	134.3	132.8	132.8	131.2	129.6	128.1	125.0	121.8	117.1	109.3
65°	117.1	117.1	115.6	115.6	114.0	112.5	112.5	109.3	106.2	101.5	95.3
67.5°	100.0	100.0	98.4	98.4	96.8	95.3	95.3	92.2	89.0	85.9	81.2
70°	81.2	79.7	79.7	79.7	78.1	76.5	76.5	75.0	71.9	68.7	65.6
72.5°	62.5	62.5	62.5	60.9	60.9	59.4	59.4	57.8	56.2	53.1	50.0
75°	46.9	46.9	46.9	45.3	45.3	43.7	43.7	42.2	40.6	39.0	35.9
77.5°	34.4	32.8	32.8	31.2	31.2	31.2	31.2	28.1	28.1	26.6	25.0
80°	21.9	21.9	21.9	21.9	20.3	20.3	20.3	18.7	18.7	17.2	15.6
82.5°	14.1	14.1	14.1	14.1	14.1	12.5	12.5	12.5	10.9	10.9	9.4
85°	9.4	9.4	7.8	7.8	7.8	7.8	7.8	6.2	6.2	6.2	4.7
87.5°	4.7	4.7	4.7	4.7	3.1	3.1	3.1	3.1	3.1	3.1	1.6
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°	859.1	859.1	859.1	859.1	859.1	859.1	859.1	859.1	859.1	859.1	859.1
2.5°	846.6	846.6	852.8	851.3	852.8	851.3	856.0	857.5	859.1	860.6	862.2
5°	838.8	840.3	845.0	848.2	849.7	849.7	857.5	860.6	865.3	870.0	873.1
7.5°	832.5	837.2	843.5	849.7	852.8	852.8	863.8	868.5	876.3	881.0	887.2
10°	827.8	835.7	843.5	852.8	860.6	860.6	874.7	882.5	890.3	898.1	907.5
12.5°	818.5	831.0	840.3	852.8	860.6	860.6	879.4	890.3	899.7	910.6	923.1
15°	812.2	821.6	837.2	849.7	857.5	860.6	881.0	893.4	904.4	916.9	929.4
17.5°	799.7	810.7	826.3	841.9	851.3	856.0	874.7	887.2	902.8	916.9	924.7
20°	782.5	795.0	810.7	827.8	835.7	840.3	862.2	873.1	888.8	902.8	912.2
22.5°	760.7	773.2	788.8	804.4	812.2	820.0	838.8	851.3	863.8	876.3	884.1
25°	731.0	746.6	759.1	774.7	782.5	788.8	804.4	816.9	827.8	838.8	849.7
27.5°	695.1	709.1	723.2	737.3	743.5	748.2	762.2	774.7	785.7	793.5	802.9
30°	657.6	667.0	681.0	693.5	698.2	701.3	712.3	720.1	732.6	740.4	745.1
32.5°	609.2	620.1	627.9	638.8	643.5	646.7	657.6	663.8	673.2	681.0	687.3
35°	559.2	560.7	570.1	579.5	579.5	584.2	593.6	599.8	604.5	612.3	617.0
37.5°	496.7	499.8	509.2	513.9	513.9	512.3	521.7	524.8	532.6	534.2	538.9
40°	437.4	440.5	442.0	443.6	443.6	443.6	446.7	445.2	453.0	454.5	456.1
42.5°	378.0	376.4	378.0	371.7	371.7	368.6	365.5	365.5	365.5	370.2	371.7
45°	320.2	315.5	306.1	298.3	299.9	293.7	285.8	282.7	279.6	279.6	279.6
47.5°	265.5	256.2	245.2	234.3	228.0	221.8	212.4	204.6	199.9	198.4	196.8
50°	221.8	212.4	198.4	182.8	176.5	168.7	157.8	146.8	142.1	137.5	135.9
52.5°	187.4	174.9	159.3	142.1	134.3	126.5	115.6	106.2	98.4	93.7	90.6
55°	157.8	145.3	128.1	110.9	104.7	95.3	82.8	73.4	65.6	60.9	56.2
57.5°	137.5	123.4	106.2	89.0	81.2	73.4	59.4	50.0	42.2	37.5	34.4
60°	117.1	104.7	89.0	71.9	64.0	56.2	43.7	34.4	26.6	23.4	18.7
62.5°	100.0	89.0	75.0	57.8	50.0	43.7	32.8	23.4	17.2	14.1	10.9
65°	87.5	76.5	64.0	50.0	42.2	35.9	26.6	18.7	14.1	9.4	7.8
67.5°	73.4	64.0	53.1	40.6	35.9	29.7	21.9	15.6	10.9	7.8	6.2
70°	59.4	51.5	42.2	32.8	28.1	23.4	17.2	12.5	7.8	6.2	4.7
72.5°	43.7	39.0	31.2	25.0	20.3	17.2	12.5	9.4	6.2	4.7	3.1
75°	31.2	28.1	21.9	17.2	14.1	12.5	9.4	6.2	4.7	3.1	1.6
77.5°	21.9	18.7	15.6	12.5	9.4	9.4	6.2	4.7	3.1	1.6	1.6
80°	14.1	12.5	9.4	7.8	6.2	4.7	3.1	1.6	1.6	1.6	0.0
82.5°	7.8	6.2	6.2	4.7	3.1	3.1	1.6	1.6	0.0	0.0	0.0
85°	4.7	3.1	3.1	1.6	1.6	1.6	1.6	0.0	0.0	0.0	0.0
87.5°	1.6	1.6	1.6	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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	859.1	859.1	859.1	859.1	859.1	859.1	859.1	859.1	859.1	859.1	859.1
2.5°	863.8	865.3	866.9	868.5	870.0	870.0	870.0	874.7	877.8	877.8	879.4
5°	876.3	881.0	881.0	885.6	887.2	888.8	890.3	896.6	901.3	898.1	902.8
7.5°	891.9	902.8	902.8	907.5	910.6	912.2	918.4	924.7	927.8	929.4	930.9
10°	913.8	923.1	927.8	929.4	934.1	937.2	945.0	951.2	955.9	959.1	962.2
12.5°	929.4	938.7	943.4	951.2	954.4	959.1	965.3	971.5	977.8	982.5	987.2
15°	938.7	948.1	954.4	959.1	963.7	968.4	974.7	984.0	988.7	991.9	996.5
17.5°	934.1	945.0	949.7	957.5	962.2	965.3	971.5	977.8	984.0	985.6	988.7
20°	918.4	927.8	935.6	938.7	943.4	948.1	952.8	959.1	965.3	965.3	971.5
22.5°	893.4	902.8	907.5	909.1	912.2	920.0	920.0	927.8	930.9	932.5	937.2
25°	854.4	862.2	866.9	870.0	873.1	874.7	879.4	885.6	885.6	888.8	890.3
27.5°	809.1	813.8	818.5	821.6	824.7	824.7	827.8	834.1	834.1	835.7	837.2
30°	754.4	760.7	762.2	765.4	763.8	766.9	771.6	774.7	776.3	774.7	779.4
32.5°	690.4	695.1	698.2	701.3	701.3	702.9	702.9	706.0	707.6	709.1	712.3
35°	618.5	623.2	624.8	626.4	631.0	627.9	629.5	632.6	632.6	635.7	632.6
37.5°	540.4	546.7	551.4	546.7	548.3	551.4	551.4	551.4	554.5	552.9	552.9
40°	460.8	460.8	462.3	465.5	463.9	468.6	467.0	468.6	467.0	468.6	470.2
42.5°	374.9	370.2	376.4	373.3	376.4	376.4	376.4	378.0	379.6	378.0	374.9
45°	276.5	279.6	274.9	274.9	276.5	278.0	278.0	278.0	279.6	276.5	278.0
47.5°	195.2	193.7	192.1	192.1	193.7	192.1	192.1	195.2	192.1	192.1	190.6
50°	135.9	132.8	132.8	129.6	131.2	129.6	131.2	131.2	128.1	129.6	128.1
52.5°	87.5	87.5	84.3	84.3	84.3	84.3	82.8	82.8	82.8	79.7	79.7
55°	54.7	53.1	50.0	50.0	50.0	48.4	46.9	46.9	48.4	46.9	46.9
57.5°	31.2	29.7	26.6	26.6	26.6	25.0	25.0	23.4	23.4	23.4	23.4
60°	17.2	14.1	12.5	12.5	12.5	10.9	10.9	10.9	9.4	9.4	9.4
62.5°	7.8	6.2	6.2	4.7	4.7	4.7	4.7	4.7	3.1	3.1	3.1
65°	6.2	4.7	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
67.5°	4.7	3.1	3.1	3.1	3.1	3.1	3.1	1.6	1.6	3.1	1.6
70°	3.1	3.1	3.1	3.1	3.1	1.6	1.6	1.6	1.6	1.6	1.6
72.5°	3.1	3.1	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
75°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0.0	1.6	1.6	1.6
77.5°	1.6	1.6	1.6	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	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°	859.1	859.1	859.1	859.1	859.1	859.1	859.1	859.1
2.5°	881.0	882.5	879.4	881.0	881.0	882.5	879.4	876.3
5°	907.5	907.5	905.9	907.5	905.9	907.5	909.1	907.5
7.5°	937.2	938.7	940.3	938.7	938.7	940.3	941.9	940.3
10°	966.9	968.4	971.5	970.0	973.1	974.7	971.5	971.5
12.5°	988.7	991.9	995.0	993.4	996.5	998.1	998.1	996.5
15°	999.7	1005.9	1005.9	1004.3	1007.5	1010.6	1010.6	1009.0
17.5°	995.0	999.7	999.7	1001.2	1002.8	1005.9	1004.3	1004.3
20°	976.2	980.9	979.4	979.4	980.9	985.6	984.0	985.6
22.5°	941.9	943.4	945.0	945.0	945.0	949.7	948.1	946.6
25°	896.6	899.7	899.7	899.7	901.3	901.3	901.3	899.7
27.5°	843.5	845.0	846.6	843.5	843.5	846.6	846.6	843.5
30°	784.1	782.5	784.1	782.5	784.1	784.1	784.1	784.1
32.5°	715.4	713.8	715.4	712.3	713.8	713.8	715.4	712.3
35°	635.7	635.7	640.4	637.3	637.3	635.7	634.2	635.7
37.5°	557.6	556.1	556.1	552.9	552.9	557.6	554.5	551.4
40°	468.6	467.0	468.6	467.0	467.0	468.6	468.6	468.6
42.5°	381.1	379.6	381.1	378.0	378.0	379.6	376.4	374.9
45°	278.0	276.5	279.6	279.6	278.0	278.0	276.5	273.3
47.5°	190.6	190.6	192.1	190.6	190.6	192.1	190.6	192.1
50°	126.5	126.5	128.1	126.5	126.5	126.5	125.0	123.4
52.5°	81.2	79.7	79.7	79.7	79.7	79.7	78.1	78.1
55°	45.3	45.3	45.3	45.3	45.3	43.7	45.3	45.3
57.5°	21.9	21.9	21.9	21.9	21.9	21.9	20.3	21.9
60°	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
62.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
65°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
67.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
70°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
72.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)