

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: P252264

Luminaire Tested: **LD6B20D010 EU6B10209027 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252264
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-7)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B20D010 EU6B10209027 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1547.0 lumens
Efficiency: N/A
Efficacy: 74.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.18 / 1.16
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

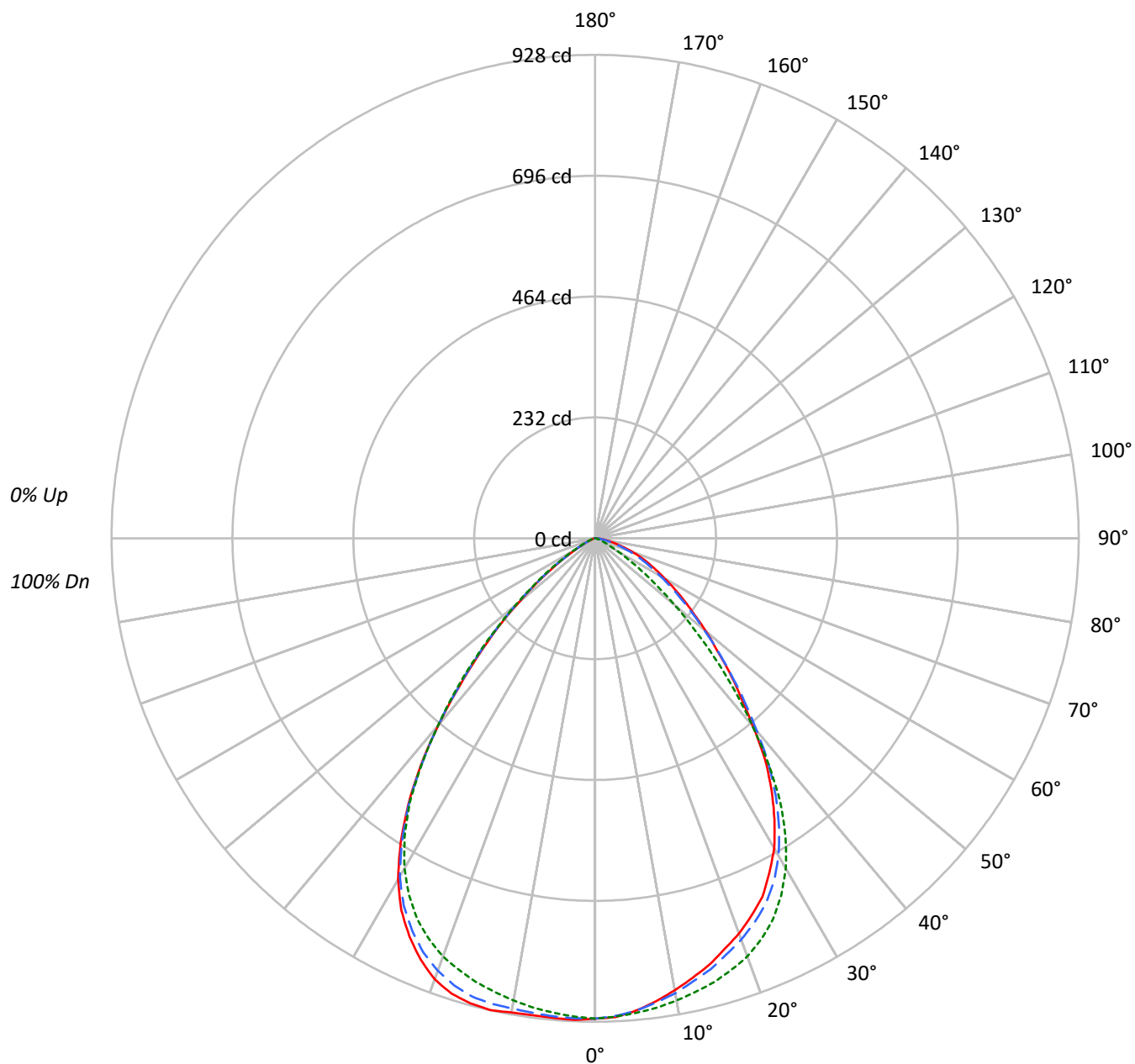
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	85	82	80			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64			
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58			
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52			
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47			
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43			
9	65	54	47	42	64	53	46	42	52	46	42	51	46	41	50	45	41	40			
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	37			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	60158	60158	60158
5°	59589	59877	60532
10°	58357	59682	61232
15°	57242	59572	62429
20°	56056	59305	62547
25°	54673	58121	60683
30°	51762	55121	56967
35°	47006	49403	49849
40°	40122	39926	39738
45°	33704	29903	28980
50°	28145	20228	19213
55°	23693	12409	11272
60°	20055	6537	5663
65°	17367	3443	2748
70°	14440	2117	1488
75°	10663	1412	832
80°	8378	827	413
85°	6662	823	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.9	5.6
10°-20°	248.8	16.1
20°-30°	367.4	23.8
30°-40°	378.7	24.5
40°-50°	261.5	16.9
50°-60°	128.9	8.3
60°-70°	52.2	3.4
70°-80°	18.6	1.2
80°-90°	3.8	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°	703.2	45.5
0°-40°	1081.8	69.9
0°-60°	1472.3	95.2
0°-90°	1547.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1547.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	922	922	922	922	922	
5°	910	910	914	921	924	86
15°	848	856	882	911	924	239
25°	760	774	807	831	843	347
35°	590	605	620	624	626	366
45°	365	368	324	320	314	282
55°	208	200	109	102	99	188
65°	112	101	22	18	18	112
75°	42	36	6	3	3	48
85°	9	7	1	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°	922.1	922.1	922.1	922.1	922.1	922.1	922.1	922.1	922.1	922.1	922.1
2.5°	919.9	916.5	918.8	914.3	919.9	914.3	915.4	916.5	915.4	916.5	917.7
5°	909.9	906.5	909.9	904.3	909.9	906.5	906.5	907.6	907.6	908.7	909.9
7.5°	896.5	893.2	896.5	890.9	897.6	894.3	894.3	896.5	895.4	896.5	898.7
10°	880.9	876.4	879.8	876.4	883.1	878.7	880.9	880.9	880.9	884.2	886.5
12.5°	864.2	859.7	864.2	858.6	865.3	862.0	863.1	866.4	867.5	869.8	870.9
15°	847.5	841.9	844.2	840.8	847.5	844.2	845.3	849.7	849.7	853.1	856.4
17.5°	826.3	821.9	826.3	821.9	827.4	825.2	827.4	830.8	830.8	834.1	837.5
20°	807.4	802.9	806.3	802.9	809.6	806.3	807.4	811.9	813.0	816.3	819.7
22.5°	784.0	780.7	782.9	779.6	786.2	784.0	785.1	789.6	790.7	792.9	798.5
25°	759.5	752.8	756.2	753.9	760.6	757.3	759.5	764.0	766.2	769.5	774.0
27.5°	723.9	720.5	722.8	722.8	728.3	725.0	726.1	730.6	733.9	737.2	742.8
30°	687.1	681.6	683.8	684.9	689.4	687.1	689.4	693.8	694.9	699.4	703.8
32.5°	640.4	638.1	642.6	640.4	642.6	642.6	643.7	647.0	649.3	651.5	657.1
35°	590.2	585.8	590.2	588.0	593.6	590.2	593.6	596.9	596.9	601.4	604.7
37.5°	535.7	530.1	532.3	532.3	534.6	533.4	533.4	539.0	540.1	543.5	546.8
40°	471.1	468.8	473.3	472.2	473.3	473.3	474.4	477.8	480.0	481.1	482.2
42.5°	413.2	414.3	415.4	415.4	415.4	415.4	415.4	419.8	418.7	422.1	423.2
45°	365.3	360.8	363.1	361.9	365.3	361.9	365.3	368.6	366.4	369.7	367.5
47.5°	316.3	316.3	316.3	315.2	317.4	316.3	318.5	319.6	319.6	319.6	318.5
50°	277.3	274.0	275.1	275.1	276.2	275.1	277.3	278.4	278.4	276.2	271.7
52.5°	239.4	238.3	238.3	240.5	240.5	239.4	239.4	239.4	239.4	236.1	233.9
55°	208.3	206.0	207.1	207.1	207.1	207.1	208.3	207.1	207.1	203.8	200.5
57.5°	180.4	178.2	178.2	178.2	179.3	178.2	178.2	178.2	177.1	173.7	169.3
60°	153.7	152.6	153.7	153.7	154.8	153.7	153.7	153.7	151.5	148.1	143.7
62.5°	131.4	131.4	131.4	132.5	132.5	131.4	131.4	130.3	129.2	124.7	120.3
65°	112.5	111.4	112.5	112.5	113.6	113.6	112.5	111.4	110.3	105.8	101.3
67.5°	93.5	92.4	93.5	93.5	94.7	93.5	93.5	93.5	90.2	88.0	83.5
70°	75.7	74.6	74.6	74.6	75.7	73.5	74.6	74.6	72.4	69.0	64.6
72.5°	57.9	57.9	57.9	57.9	57.9	57.9	56.8	56.8	54.6	51.2	49.0
75°	42.3	42.3	43.4	43.4	42.3	42.3	42.3	41.2	40.1	37.9	35.6
77.5°	31.2	31.2	31.2	31.2	30.1	30.1	30.1	29.0	27.8	26.7	24.5
80°	22.3	22.3	22.3	21.2	22.3	21.2	21.2	21.2	18.9	17.8	16.7
82.5°	15.6	14.5	14.5	14.5	14.5	14.5	14.5	13.4	13.4	12.3	11.1
85°	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	7.8	6.7	6.7
87.5°	4.5	5.6	5.6	5.6	5.6	5.6	5.6	4.5	4.5	4.5	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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	922.1	922.1	922.1	922.1	922.1	922.1	922.1	922.1	922.1	922.1	922.1
2.5°	917.7	917.7	919.9	916.5	922.1	918.8	917.7	923.2	919.9	918.8	921.0
5°	909.9	911.0	912.1	909.9	915.4	912.1	912.1	917.7	915.4	914.3	917.7
7.5°	899.8	900.9	903.2	902.1	906.5	904.3	905.4	911.0	908.7	908.7	912.1
10°	887.6	889.8	892.0	892.0	897.6	895.4	895.4	902.1	899.8	900.9	905.4
12.5°	873.1	876.4	879.8	880.9	886.5	883.1	884.2	892.0	890.9	892.0	896.5
15°	857.5	862.0	865.3	865.3	872.0	868.7	872.0	879.8	877.6	882.0	887.6
17.5°	839.7	844.2	848.6	849.7	856.4	854.2	858.6	866.4	866.4	868.7	875.3
20°	823.0	828.6	830.8	834.1	840.8	839.7	841.9	850.8	850.8	854.2	860.9
22.5°	800.7	806.3	810.7	814.1	819.7	819.7	823.0	830.8	830.8	833.0	839.7
25°	776.2	782.9	786.2	789.6	795.2	794.0	797.4	804.1	805.2	807.4	814.1
27.5°	745.0	750.6	755.1	757.3	765.1	760.6	764.0	771.8	770.6	772.9	778.4
30°	706.1	711.6	716.1	716.1	722.8	722.8	726.1	729.4	729.4	731.7	736.1
32.5°	660.4	667.1	667.1	670.4	674.9	670.4	674.9	679.3	677.1	680.4	683.8
35°	608.1	611.4	612.5	612.5	615.9	614.7	613.6	617.0	614.7	620.3	623.6
37.5°	544.6	549.0	546.8	549.0	547.9	544.6	544.6	550.1	545.7	546.8	550.1
40°	483.3	483.3	482.2	476.6	477.8	474.4	473.3	474.4	470.0	468.8	473.3
42.5°	419.8	418.7	415.4	407.6	408.7	403.1	398.7	398.7	396.5	395.3	396.5
45°	363.1	359.7	354.1	345.2	343.0	338.6	329.6	327.4	324.1	324.1	325.2
47.5°	310.7	306.3	297.3	287.3	281.8	276.2	267.3	263.9	258.4	256.1	258.4
50°	267.3	259.5	248.3	233.9	228.3	221.6	212.7	207.1	201.6	199.3	198.2
52.5°	227.2	216.0	204.9	187.1	182.6	176.0	163.7	158.1	152.6	148.1	148.1
55°	192.7	182.6	167.0	150.3	143.7	137.0	124.7	116.9	111.4	109.1	106.9
57.5°	161.5	150.3	135.9	118.0	111.4	104.7	92.4	84.6	79.1	75.7	73.5
60°	135.9	123.6	109.1	93.5	85.8	79.1	66.8	59.0	53.5	50.1	47.9
62.5°	111.4	101.3	86.9	72.4	65.7	59.0	49.0	41.2	35.6	33.4	30.1
65°	93.5	83.5	70.2	57.9	52.3	45.7	36.8	30.1	25.6	22.3	20.0
67.5°	75.7	67.9	56.8	45.7	40.1	35.6	27.8	22.3	17.8	15.6	14.5
70°	60.1	52.3	43.4	34.5	31.2	26.7	21.2	15.6	13.4	11.1	10.0
72.5°	44.5	39.0	32.3	25.6	22.3	20.0	14.5	12.3	8.9	7.8	6.7
75°	32.3	27.8	23.4	17.8	15.6	14.5	11.1	7.8	6.7	5.6	4.5
77.5°	22.3	20.0	15.6	12.3	11.1	10.0	7.8	5.6	4.5	3.3	3.3
80°	14.5	12.3	10.0	7.8	7.8	6.7	4.5	3.3	3.3	2.2	2.2
82.5°	8.9	7.8	6.7	5.6	4.5	4.5	3.3	2.2	2.2	1.1	1.1
85°	5.6	4.5	3.3	3.3	2.2	2.2	2.2	1.1	1.1	1.1	1.1
87.5°	2.2	2.2	2.2	1.1	1.1	1.1	1.1	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°	922.1	922.1	922.1	922.1	922.1	922.1	922.1	922.1	922.1	922.1	922.1
2.5°	921.0	921.0	923.2	919.9	922.1	922.1	924.3	919.9	922.1	923.2	925.4
5°	916.5	917.7	919.9	918.8	919.9	919.9	922.1	916.5	921.0	921.0	924.3
7.5°	912.1	912.1	914.3	913.2	915.4	916.5	918.8	914.3	918.8	918.8	922.1
10°	906.5	906.5	909.9	908.7	912.1	913.2	916.5	912.1	916.5	917.7	921.0
12.5°	898.7	899.8	903.2	903.2	906.5	908.7	912.1	909.9	915.4	916.5	921.0
15°	889.8	892.0	896.5	895.4	898.7	902.1	906.5	903.2	911.0	913.2	917.7
17.5°	878.7	880.9	884.2	884.2	887.6	889.8	895.4	893.2	899.8	900.9	906.5
20°	862.0	865.3	869.8	868.7	872.0	874.2	878.7	876.4	883.1	885.4	890.9
22.5°	841.9	844.2	847.5	847.5	850.8	853.1	857.5	854.2	860.9	862.0	866.4
25°	815.2	817.4	819.7	820.8	824.1	825.2	827.4	825.2	830.8	831.9	837.5
27.5°	780.7	781.8	785.1	785.1	787.4	788.5	791.8	787.4	795.2	795.2	798.5
30°	739.5	738.4	742.8	740.6	742.8	742.8	746.1	743.9	749.5	747.3	750.6
32.5°	684.9	687.1	687.1	684.9	689.4	688.2	688.2	686.0	689.4	690.5	692.7
35°	621.4	624.8	624.8	625.9	627.0	623.6	624.8	618.1	623.6	624.8	625.9
37.5°	552.4	549.0	551.3	547.9	553.5	546.8	546.8	542.4	546.8	546.8	547.9
40°	473.3	472.2	474.4	472.2	471.1	470.0	467.7	464.4	468.8	466.6	470.0
42.5°	398.7	397.6	397.6	395.3	394.2	394.2	392.0	389.8	388.7	388.7	394.2
45°	321.8	324.1	321.8	320.7	323.0	320.7	321.8	317.4	319.6	317.4	319.6
47.5°	257.3	258.4	256.1	253.9	257.3	253.9	253.9	250.6	255.0	255.0	252.8
50°	199.3	198.2	196.0	198.2	197.1	197.1	197.1	193.8	196.0	192.7	194.9
52.5°	147.0	145.9	145.9	144.8	145.9	144.8	144.8	143.7	143.7	142.5	143.7
55°	106.9	105.8	103.6	103.6	103.6	104.7	103.6	102.5	102.5	101.3	102.5
57.5°	72.4	70.2	70.2	70.2	70.2	69.0	69.0	67.9	69.0	67.9	69.0
60°	46.8	46.8	44.5	44.5	44.5	44.5	44.5	43.4	44.5	44.5	44.5
62.5°	29.0	29.0	27.8	26.7	27.8	26.7	26.7	26.7	27.8	26.7	27.8
65°	18.9	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8
67.5°	13.4	12.3	12.3	12.3	12.3	12.3	12.3	11.1	12.3	12.3	12.3
70°	8.9	8.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
72.5°	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
75°	4.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
77.5°	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
80°	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
82.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
85°	1.1	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	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
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°	922.1	922.1	922.1	922.1	922.1	922.1	922.1	922.1
2.5°	922.1	923.2	921.0	922.1	919.9	922.1	923.2	925.4
5°	919.9	921.0	918.8	921.0	918.8	921.0	922.1	924.3
7.5°	917.7	919.9	917.7	919.9	917.7	919.9	921.0	923.2
10°	917.7	921.0	918.8	922.1	918.8	921.0	923.2	924.3
12.5°	917.7	921.0	919.9	922.1	921.0	923.2	925.4	927.7
15°	915.4	918.8	916.5	919.9	918.8	919.9	924.3	924.3
17.5°	903.2	906.5	906.5	908.7	908.7	912.1	914.3	916.5
20°	887.6	890.9	889.8	893.2	893.2	896.5	898.7	900.9
22.5°	864.2	868.7	867.5	870.9	869.8	872.0	876.4	875.3
25°	834.1	839.7	838.6	840.8	839.7	839.7	841.9	843.0
27.5°	797.4	800.7	799.6	801.8	799.6	801.8	804.1	805.2
30°	749.5	751.7	750.6	751.7	750.6	752.8	753.9	756.2
32.5°	691.6	694.9	691.6	693.8	692.7	692.7	697.1	694.9
35°	622.5	623.6	624.8	624.8	622.5	623.6	625.9	625.9
37.5°	545.7	551.3	544.6	547.9	546.8	546.8	546.8	550.1
40°	465.5	466.6	464.4	464.4	464.4	463.3	467.7	466.6
42.5°	389.8	390.9	389.8	386.4	387.6	387.6	390.9	386.4
45°	316.3	318.5	317.4	317.4	315.2	315.2	316.3	314.1
47.5°	250.6	252.8	249.5	250.6	248.3	250.6	249.5	251.7
50°	190.4	192.7	191.5	192.7	192.7	190.4	193.8	189.3
52.5°	142.5	143.7	142.5	141.4	140.3	140.3	142.5	141.4
55°	101.3	100.2	100.2	100.2	101.3	101.3	100.2	99.1
57.5°	67.9	67.9	66.8	66.8	67.9	65.7	66.8	65.7
60°	43.4	43.4	43.4	43.4	42.3	43.4	43.4	43.4
62.5°	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7
65°	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8
67.5°	11.1	12.3	12.3	12.3	11.1	11.1	11.1	11.1
70°	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
72.5°	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
75°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
77.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
80°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
82.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.1	1.1	1.1	1.1	1.1	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)