

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: P252683

Luminaire Tested: **LD6B20D010 EU6B10209040 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252683
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 EU6B10209040 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1651.0 lumens
Efficiency: N/A
Efficacy: 79.4 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

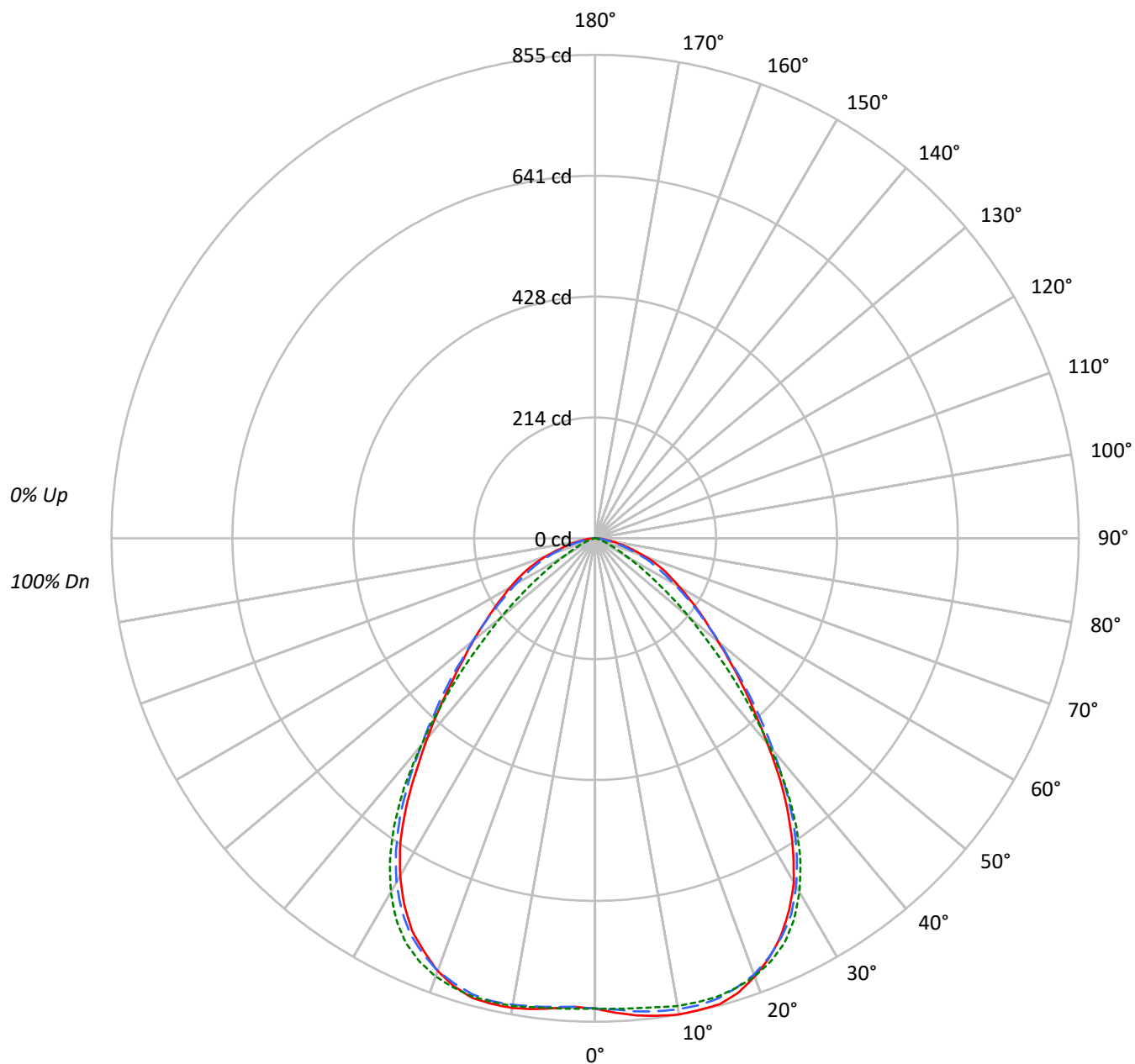
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	111	107	104	101	109	105	102	99	101	98	96	97	95	93	94	92	91	89		
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78		
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68		
4	89	78	71	65	87	77	70	65	75	69	64	73	67	63	71	66	62	61		
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54		
6	77	65	57	52	75	64	57	51	63	56	51	61	55	51	59	54	50	48		
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	45	44		
8	67	55	47	42	66	54	47	42	53	47	42	52	46	42	51	45	41	40		
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36		
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	54267	54267	54267
5°	55476	54632	54632
10°	56661	55648	55886
15°	57613	56661	56816
20°	57257	57257	56528
25°	55896	56911	55133
30°	52914	54421	51935
35°	47412	49292	46480
40°	40283	40777	39278
45°	34082	31158	32892
50°	28774	21974	28419
55°	25297	14184	25024
60°	22417	8442	22573
65°	20701	5079	20701
70°	17950	2918	17511
75°	14242	1790	13335
80°	10595	1315	10182
85°	9656	898	8833



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.1	4.9
10°-20°	237.0	14.4
20°-30°	356.5	21.6
30°-40°	374.8	22.7
40°-50°	280.0	17.0
50°-60°	174.3	10.6
60°-70°	99.1	6.0
70°-80°	40.8	2.5
80°-90°	8.4	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°	673.6	40.8
0°-40°	1048.3	63.5
0°-60°	1502.6	91.0
0°-90°	1651.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1651.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	832	832	832	832	832	
5°	847	840	834	832	834	81
15°	853	842	839	835	841	240
25°	776	779	791	773	766	355
35°	595	611	619	601	584	369
45°	369	378	338	371	356	286
55°	222	218	125	214	220	200
65°	134	120	33	120	134	132
75°	56	45	7	44	53	61
85°	13	8	1	7	12	14
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°	831.8	831.8	831.8	831.8	831.8	831.8	831.8	831.8	831.8	831.8	831.8
2.5°	840.0	838.9	840.0	837.7	836.5	836.5	837.7	835.3	834.2	835.3	834.2
5°	847.1	844.8	845.9	844.8	842.4	842.4	843.6	840.0	840.0	841.2	840.0
7.5°	851.8	851.8	851.8	849.5	848.3	847.1	849.5	845.9	844.8	844.8	843.6
10°	855.3	854.2	855.3	853.0	850.6	849.5	851.8	849.5	847.1	849.5	845.9
12.5°	854.2	854.2	854.2	853.0	850.6	849.5	851.8	848.3	847.1	848.3	845.9
15°	853.0	849.5	850.6	849.5	845.9	845.9	847.1	843.6	841.2	844.8	842.4
17.5°	842.4	840.0	841.2	838.9	836.5	835.3	836.5	835.3	833.0	835.3	833.0
20°	824.7	824.7	825.9	823.6	821.2	820.0	822.4	820.0	817.7	821.2	821.2
22.5°	803.6	803.6	803.6	802.4	801.2	801.2	801.2	800.0	798.9	801.2	802.4
25°	776.5	775.3	776.5	777.7	776.5	775.3	776.5	776.5	774.2	778.9	778.9
27.5°	742.4	742.4	744.7	743.6	743.6	742.4	744.7	744.7	743.6	747.1	750.6
30°	702.4	700.0	702.4	702.4	703.6	703.6	704.7	704.7	704.7	708.3	710.6
32.5°	650.6	651.8	655.3	654.2	653.0	656.5	656.5	658.9	660.0	662.4	663.6
35°	595.3	596.5	596.5	597.7	600.0	597.7	603.6	602.4	603.6	608.3	610.6
37.5°	536.5	533.0	538.9	536.5	537.7	537.7	540.0	541.2	544.7	550.6	550.6
40°	473.0	474.1	476.5	477.7	478.8	478.8	478.8	482.4	483.6	490.6	489.4
42.5°	417.7	417.7	420.0	421.2	421.2	421.2	421.2	424.7	427.1	429.4	431.8
45°	369.4	365.9	368.3	368.3	370.6	369.4	371.8	374.1	375.3	378.8	377.7
47.5°	323.5	322.4	323.5	324.7	323.5	324.7	325.9	327.1	328.3	328.3	328.3
50°	283.5	283.5	284.7	285.9	285.9	285.9	285.9	287.1	287.1	289.4	287.1
52.5°	250.6	251.8	251.8	250.6	251.8	251.8	253.0	253.0	251.8	251.8	248.2
55°	222.4	221.2	222.4	221.2	222.4	222.4	221.2	221.2	220.0	218.8	217.7
57.5°	195.3	195.3	195.3	195.3	194.1	195.3	194.1	193.0	193.0	190.6	187.1
60°	171.8	171.8	171.8	171.8	171.8	170.6	171.8	170.6	168.2	165.9	161.2
62.5°	151.8	150.6	151.8	150.6	150.6	149.4	149.4	148.2	145.9	143.5	138.8
65°	134.1	135.3	134.1	134.1	132.9	131.8	131.8	130.6	127.1	124.7	120.0
67.5°	115.3	114.1	114.1	114.1	112.9	112.9	112.9	110.6	108.2	104.7	100.0
70°	94.1	94.1	94.1	92.9	92.9	91.8	91.8	90.6	88.2	85.9	80.0
72.5°	74.1	74.1	74.1	71.8	72.9	71.8	71.8	69.4	68.2	64.7	61.2
75°	56.5	56.5	55.3	55.3	54.1	52.9	52.9	51.8	50.6	48.2	44.7
77.5°	41.2	41.2	41.2	40.0	38.8	37.6	37.6	36.5	35.3	34.1	31.8
80°	28.2	28.2	28.2	28.2	27.1	25.9	25.9	24.7	24.7	23.5	21.2
82.5°	18.8	18.8	18.8	18.8	17.6	17.6	17.6	16.5	15.3	15.3	12.9
85°	12.9	12.9	11.8	11.8	11.8	11.8	10.6	10.6	9.4	8.2	8.2
87.5°	7.1	7.1	7.1	7.1	5.9	5.9	5.9	5.9	4.7	4.7	3.5
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°	831.8	831.8	831.8	831.8	831.8	831.8	831.8	831.8	831.8	831.8	831.8
2.5°	837.7	837.7	836.5	833.0	834.2	833.0	834.2	833.0	829.5	833.0	829.5
5°	842.4	843.6	841.2	836.5	837.7	836.5	836.5	835.3	831.8	834.2	831.8
7.5°	847.1	845.9	844.8	840.0	841.2	840.0	840.0	837.7	834.2	836.5	833.0
10°	849.5	849.5	847.1	842.4	842.4	841.2	842.4	841.2	836.5	840.0	837.7
12.5°	849.5	848.3	848.3	842.4	843.6	842.4	843.6	841.2	837.7	840.0	838.9
15°	845.9	845.9	844.8	838.9	840.0	840.0	841.2	838.9	835.3	838.9	836.5
17.5°	838.9	838.9	837.7	833.0	835.3	835.3	836.5	834.2	830.6	833.0	833.0
20°	824.7	825.9	825.9	822.4	824.7	824.7	825.9	824.7	823.6	824.7	822.4
22.5°	808.3	810.6	810.6	807.1	809.5	809.5	813.0	811.8	809.5	810.6	809.5
25°	783.6	785.9	788.3	785.9	788.3	788.3	791.8	790.6	788.3	790.6	787.1
27.5°	755.3	756.5	758.9	756.5	760.0	758.9	762.4	761.2	757.7	761.2	760.0
30°	715.3	720.0	723.6	720.0	723.6	723.6	725.9	724.7	723.6	722.4	722.4
32.5°	670.6	675.3	675.3	674.2	676.5	676.5	677.7	675.3	674.2	675.3	676.5
35°	615.3	617.7	620.0	618.9	620.0	621.2	620.0	621.2	617.7	618.9	618.9
37.5°	555.3	557.7	557.7	554.1	556.5	556.5	554.1	554.1	551.8	554.1	549.4
40°	491.8	489.4	490.6	488.3	485.9	485.9	484.7	480.0	477.7	478.8	480.0
42.5°	429.4	429.4	425.9	420.0	414.1	414.1	410.6	408.3	403.6	405.9	404.7
45°	376.5	370.6	365.9	356.5	353.0	350.6	344.7	338.8	336.5	337.7	336.5
47.5°	325.9	321.2	309.4	296.5	293.0	289.4	282.4	275.3	273.0	270.6	270.6
50°	283.5	275.3	262.4	248.2	242.4	236.5	227.1	220.0	215.3	216.5	216.5
52.5°	244.7	235.3	220.0	202.4	195.3	188.2	180.0	171.8	168.2	167.1	167.1
55°	210.6	200.0	184.7	164.7	158.8	150.6	140.0	130.6	125.9	124.7	127.1
57.5°	180.0	170.6	152.9	132.9	125.9	117.7	107.1	98.8	92.9	91.8	92.9
60°	155.3	142.4	127.1	108.2	98.8	91.8	80.0	72.9	67.1	64.7	65.9
62.5°	130.6	118.8	103.5	84.7	77.7	70.6	60.0	51.8	47.1	45.9	47.1
65°	111.8	100.0	85.9	69.4	62.4	55.3	45.9	37.6	34.1	32.9	34.1
67.5°	92.9	82.4	70.6	55.3	49.4	43.5	34.1	28.2	23.5	22.4	23.5
70°	75.3	65.9	54.1	43.5	37.6	32.9	25.9	20.0	16.5	15.3	16.5
72.5°	56.5	49.4	41.2	31.8	28.2	24.7	18.8	14.1	11.8	10.6	11.8
75°	41.2	35.3	29.4	22.4	20.0	17.6	12.9	9.4	8.2	7.1	8.2
77.5°	28.2	24.7	20.0	15.3	12.9	11.8	8.2	7.1	5.9	4.7	4.7
80°	18.8	16.5	12.9	10.6	9.4	8.2	5.9	4.7	3.5	3.5	3.5
82.5°	11.8	9.4	8.2	5.9	4.7	4.7	3.5	2.4	2.4	2.4	2.4
85°	7.1	5.9	4.7	3.5	2.4	2.4	1.2	1.2	1.2	1.2	1.2
87.5°	3.5	2.4	2.4	1.2	1.2	1.2	1.2	1.2	0.0	0.0	1.2
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	831.8	831.8	831.8	831.8	831.8	831.8	831.8	831.8	831.8	831.8	831.8
2.5°	831.8	829.5	829.5	830.6	831.8	833.0	830.6	829.5	829.5	833.0	830.6
5°	831.8	830.6	830.6	830.6	833.0	834.2	831.8	830.6	831.8	835.3	834.2
7.5°	835.3	833.0	834.2	834.2	835.3	837.7	835.3	834.2	835.3	838.9	836.5
10°	837.7	835.3	836.5	835.3	838.9	840.0	837.7	836.5	837.7	842.4	841.2
12.5°	838.9	837.7	837.7	836.5	840.0	841.2	838.9	837.7	838.9	842.4	841.2
15°	836.5	835.3	835.3	835.3	837.7	840.0	836.5	835.3	835.3	838.9	837.7
17.5°	831.8	829.5	829.5	829.5	830.6	831.8	828.3	827.1	825.9	829.5	828.3
20°	823.6	821.2	818.9	818.9	820.0	820.0	817.7	814.2	814.2	815.3	813.0
22.5°	808.3	807.1	804.7	803.6	805.9	804.7	800.0	796.5	795.3	796.5	794.2
25°	787.1	784.7	783.6	782.4	783.6	782.4	777.7	773.0	773.0	773.0	769.5
27.5°	757.7	755.3	754.2	754.2	755.3	753.0	748.3	743.6	741.2	741.2	737.7
30°	720.0	720.0	718.9	717.7	716.5	716.5	709.4	704.7	702.4	703.6	701.2
32.5°	674.2	673.0	671.8	668.3	669.4	668.3	662.4	658.9	655.3	653.0	651.8
35°	615.3	615.3	614.2	614.2	614.2	613.0	607.1	603.6	601.2	600.0	596.5
37.5°	550.6	549.4	548.3	548.3	548.3	548.3	544.7	541.2	541.2	540.0	537.7
40°	477.7	478.8	480.0	478.8	482.4	485.9	481.2	478.8	477.7	481.2	476.5
42.5°	407.1	405.9	411.8	413.0	413.0	418.8	420.0	421.2	420.0	422.4	422.4
45°	338.8	337.7	343.5	345.9	351.8	358.8	362.4	368.3	370.6	373.0	370.6
47.5°	274.1	278.8	283.5	289.4	294.1	305.9	313.0	318.8	321.2	324.7	324.7
50°	220.0	224.7	233.0	237.7	243.5	257.7	269.4	277.7	282.4	285.9	284.7
52.5°	169.4	177.7	188.2	193.0	201.2	217.7	230.6	240.0	245.9	249.4	250.6
55°	130.6	137.7	148.2	155.3	163.5	181.2	197.7	208.2	214.1	218.8	221.2
57.5°	96.5	104.7	116.5	122.4	131.8	151.8	165.9	178.8	185.9	191.8	193.0
60°	70.6	78.8	89.4	96.5	105.9	125.9	142.4	154.1	162.4	167.1	169.4
62.5°	50.6	58.8	69.4	76.5	84.7	102.4	118.8	130.6	138.8	144.7	148.2
65°	36.5	44.7	55.3	61.2	68.2	84.7	100.0	111.8	120.0	127.1	129.4
67.5°	27.1	32.9	42.4	48.2	55.3	68.2	81.2	91.8	100.0	105.9	108.2
70°	20.0	24.7	32.9	36.5	41.2	52.9	63.5	72.9	80.0	84.7	87.1
72.5°	14.1	17.6	23.5	27.1	30.6	40.0	48.2	55.3	60.0	64.7	67.1
75°	9.4	11.8	16.5	18.8	21.2	28.2	34.1	40.0	43.5	47.1	48.2
77.5°	5.9	8.2	11.8	12.9	15.3	18.8	23.5	27.1	29.4	31.8	34.1
80°	3.5	4.7	7.1	8.2	9.4	12.9	15.3	17.6	20.0	22.4	23.5
82.5°	2.4	3.5	4.7	4.7	5.9	7.1	9.4	11.8	12.9	14.1	15.3
85°	1.2	1.2	2.4	2.4	3.5	3.5	4.7	5.9	7.1	8.2	9.4
87.5°	1.2	1.2	1.2	1.2	2.4	2.4	3.5	3.5	3.5	4.7	4.7
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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CATALOG NUMBER: LD6B20D010 EU6B10209040 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	831.8	831.8	831.8	831.8	831.8	831.8	831.8	831.8
2.5°	828.3	831.8	828.3	830.6	829.5	829.5	828.3	829.5
5°	831.8	836.5	831.8	835.3	833.0	833.0	833.0	834.2
7.5°	835.3	840.0	836.5	840.0	838.9	837.7	837.7	840.0
10°	838.9	842.4	840.0	843.6	842.4	841.2	841.2	843.6
12.5°	838.9	843.6	841.2	844.8	843.6	842.4	842.4	843.6
15°	835.3	841.2	837.7	841.2	840.0	838.9	838.9	841.2
17.5°	824.7	829.5	827.1	829.5	829.5	828.3	829.5	830.6
20°	810.6	814.2	811.8	814.2	814.2	811.8	813.0	814.2
22.5°	790.6	794.2	791.8	794.2	793.0	791.8	791.8	790.6
25°	765.9	770.6	767.1	769.5	767.1	764.7	764.7	765.9
27.5°	735.3	738.9	734.2	736.5	734.2	731.8	731.8	730.6
30°	695.3	696.5	693.0	695.3	693.0	691.8	689.4	689.4
32.5°	647.1	648.3	644.7	644.7	642.4	642.4	637.7	641.2
35°	590.6	591.8	590.6	589.4	585.9	584.7	583.6	583.6
37.5°	531.8	531.8	528.3	527.1	524.7	522.4	523.6	520.0
40°	471.8	470.6	467.1	468.3	467.1	463.6	462.4	461.2
42.5°	415.3	415.3	411.8	413.0	410.6	409.4	405.9	407.1
45°	365.9	365.9	362.4	362.4	361.2	357.7	358.8	356.5
47.5°	321.2	321.2	320.0	320.0	316.5	315.3	315.3	315.3
50°	282.4	282.4	282.4	282.4	281.2	280.0	278.8	280.0
52.5°	249.4	251.8	250.6	250.6	249.4	248.2	247.1	247.1
55°	220.0	221.2	221.2	222.4	221.2	220.0	221.2	220.0
57.5°	194.1	196.5	196.5	196.5	196.5	196.5	195.3	194.1
60°	171.8	173.0	173.0	174.1	174.1	174.1	173.0	173.0
62.5°	149.4	151.8	152.9	152.9	154.1	152.9	152.9	152.9
65°	131.8	134.1	135.3	134.1	135.3	135.3	134.1	134.1
67.5°	110.6	112.9	112.9	112.9	112.9	114.1	112.9	112.9
70°	89.4	91.8	90.6	91.8	91.8	91.8	91.8	91.8
72.5°	68.2	69.4	70.6	70.6	71.8	70.6	70.6	70.6
75°	49.4	51.8	51.8	51.8	51.8	52.9	52.9	52.9
77.5°	35.3	36.5	36.5	37.6	37.6	37.6	37.6	38.8
80°	24.7	24.7	25.9	25.9	27.1	27.1	27.1	27.1
82.5°	16.5	17.6	17.6	17.6	17.6	17.6	17.6	17.6
85°	9.4	10.6	10.6	10.6	10.6	11.8	11.8	11.8
87.5°	5.9	5.9	5.9	5.9	5.9	5.9	4.7	4.7
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)