

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: P252557

Luminaire Tested: **LD6B15D010 EU6B10208027 6LBDW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252557  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-8)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD6B15D010 EU6B10208027 6LBDW1LI  
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1398.0 lumens  
Efficiency: N/A  
Efficacy: 97.2 lumens/watt  
Spacing Criteria (0/90/45): 1.11 / 1.22 / 1.15  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

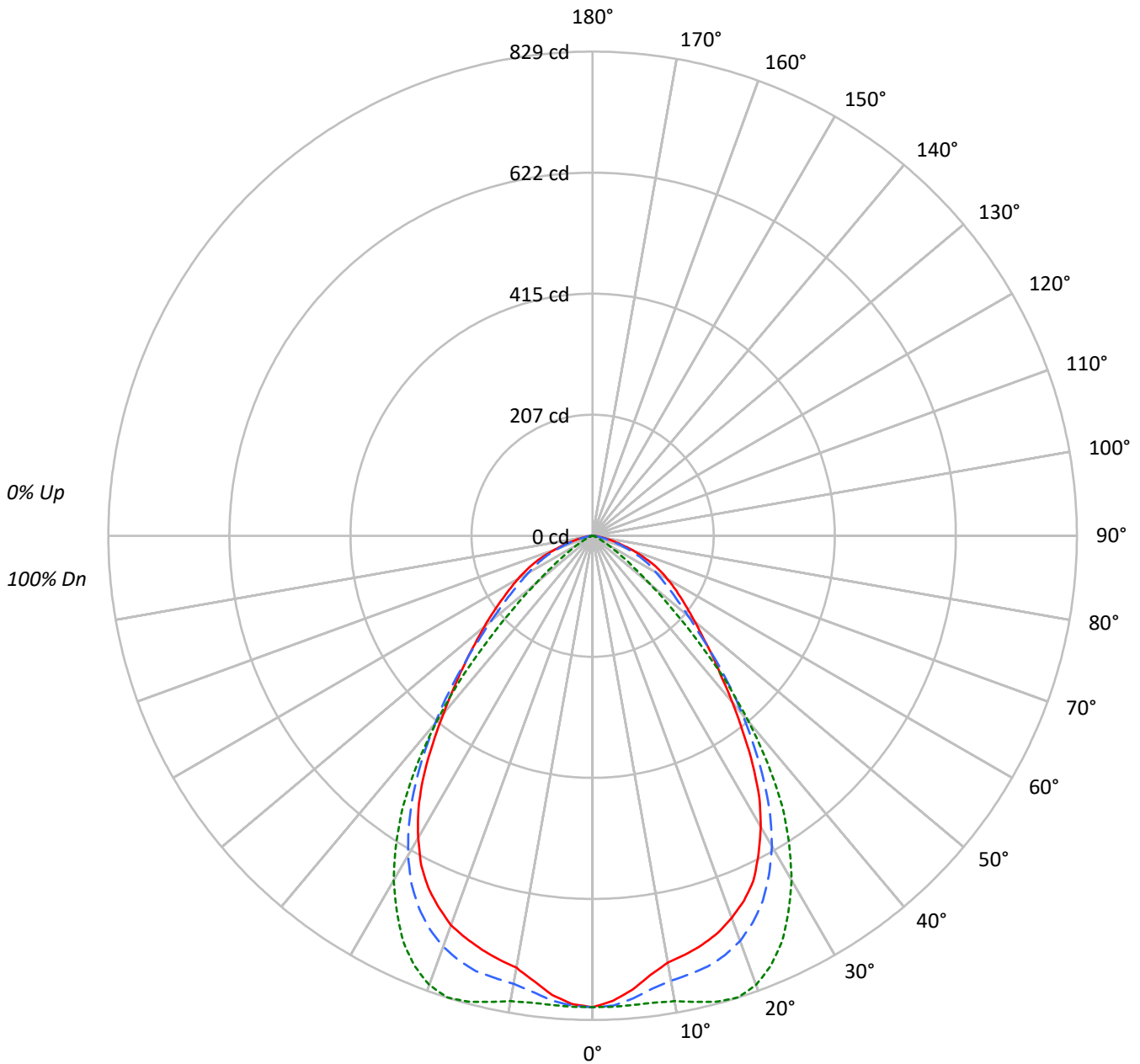
Input Watts (W): 14.39  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89																			
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79																			
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70																			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62																			
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56																			
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50																			
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46																			
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42																			
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38																			
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	52656	52656	52656
5°	51089	52798	51698
10°	49142	53594	49758
15°	48968	55776	49535
20°	48329	56813	49238
25°	46884	55213	47892
30°	43369	51317	44989
35°	38046	45110	40276
40°	31707	35361	33777
45°	26692	23334	28500
50°	23111	12789	24532
55°	20906	6790	21441
60°	19233	3536	19233
65°	17429	1868	16996
70°	14058	1068	12990
75°	9654	706	8949
80°	6312	338	5598
85°	4192	674	3518



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.3	5.4
10°-20°	217.6	15.6
20°-30°	321.6	23.0
30°-40°	324.8	23.2
40°-50°	223.9	16.0
50°-60°	128.6	9.2
60°-70°	74.8	5.4
70°-80°	27.3	2.0
80°-90°	4.2	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°	614.5	44.0
0°-40°	939.3	67.2
0°-60°	1291.7	92.4
0°-90°	1398.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1398.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	807	807	807	807	807	
5°	780	795	806	799	789	73
15°	725	763	826	772	733	204
25°	651	690	767	704	665	297
35°	478	510	566	534	506	297
45°	289	293	253	312	309	225
55°	184	161	60	168	188	165
65°	113	95	12	94	110	111
75°	38	31	3	30	36	43
85°	6	3	1	4	5	7
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°	807.1	807.1	807.1	807.1	807.1	807.1	807.1	807.1	807.1	807.1	807.1
2.5°	796.9	797.8	798.7	797.8	798.7	802.5	799.7	801.5	801.5	802.5	805.3
5°	780.1	780.1	781.9	781.0	783.8	787.5	784.7	787.5	788.5	790.3	795.0
7.5°	758.6	758.6	759.5	759.5	763.3	767.0	765.1	768.9	772.6	776.3	781.9
10°	741.8	743.7	743.7	744.6	748.3	753.0	752.1	756.7	760.5	766.1	773.5
12.5°	734.4	735.3	735.3	737.2	740.9	745.6	744.6	749.3	754.9	761.4	768.9
15°	725.0	726.9	726.0	727.8	731.6	736.2	735.3	740.0	746.5	753.0	763.3
17.5°	712.9	713.8	714.8	714.8	718.5	722.2	722.2	726.9	734.4	741.8	753.0
20°	696.1	698.0	698.0	698.9	701.7	707.3	706.4	711.0	718.5	726.0	738.1
22.5°	676.5	677.4	677.4	678.4	683.0	685.8	686.8	690.5	697.0	705.4	716.6
25°	651.3	652.2	651.3	654.1	656.0	661.6	659.7	664.4	671.8	678.4	689.6
27.5°	614.9	616.8	616.8	617.7	622.4	627.0	627.0	631.7	638.2	642.9	654.1
30°	575.7	578.5	575.7	580.4	582.3	586.0	588.8	591.6	597.2	603.7	614.0
32.5°	530.9	530.0	530.9	532.8	538.4	541.2	543.1	545.9	551.5	557.1	565.5
35°	477.7	479.6	480.5	484.3	484.3	488.9	489.9	491.7	500.1	503.9	510.4
37.5°	421.8	423.6	424.6	426.4	430.2	432.0	434.8	437.6	443.2	449.8	453.5
40°	372.3	372.3	373.2	375.1	377.9	378.8	381.6	385.4	389.1	394.7	398.4
42.5°	325.7	326.6	325.7	327.5	330.3	334.1	333.1	337.8	338.7	342.4	345.2
45°	289.3	289.3	287.4	289.3	289.3	293.0	292.1	293.9	293.0	294.9	293.0
47.5°	254.7	255.7	254.7	255.7	255.7	255.7	256.6	254.7	255.7	252.9	247.3
50°	227.7	228.6	226.7	227.7	226.7	225.8	226.7	223.9	223.0	219.3	213.7
52.5°	204.3	203.4	202.5	202.5	202.5	201.6	200.6	197.8	195.0	191.3	184.8
55°	183.8	182.9	182.0	182.0	180.1	179.2	179.2	176.4	173.6	168.9	161.4
57.5°	165.2	164.2	163.3	163.3	162.4	160.5	160.5	157.7	154.0	148.4	141.8
60°	147.4	147.4	147.4	146.5	146.5	144.6	144.6	141.8	138.1	132.5	125.0
62.5°	131.6	130.6	130.6	130.6	130.6	129.7	128.8	126.9	123.2	117.6	111.0
65°	112.9	112.9	112.9	112.9	112.0	112.0	112.0	109.2	107.3	101.7	95.2
67.5°	92.4	92.4	92.4	92.4	91.4	92.4	92.4	90.5	88.6	83.0	77.4
70°	73.7	72.8	71.8	72.8	71.8	71.8	72.8	70.9	70.0	65.3	59.7
72.5°	54.1	55.1	54.1	54.1	54.1	53.2	54.1	53.2	51.3	47.6	43.9
75°	38.3	39.2	39.2	38.3	38.3	38.3	37.3	37.3	35.5	32.7	30.8
77.5°	26.1	26.1	26.1	26.1	25.2	25.2	25.2	24.3	23.3	21.5	19.6
80°	16.8	16.8	16.8	16.8	15.9	15.9	15.9	14.9	14.9	13.1	11.2
82.5°	10.3	10.3	10.3	10.3	10.3	10.3	9.3	9.3	8.4	7.5	6.5
85°	5.6	5.6	5.6	5.6	5.6	5.6	5.6	4.7	4.7	3.7	2.8
87.5°	1.9	1.9	2.8	2.8	2.8	2.8	2.8	2.8	1.9	1.9	1.9
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°	807.1	807.1	807.1	807.1	807.1	807.1	807.1	807.1	807.1	807.1	807.1
2.5°	803.4	804.3	804.3	804.3	807.1	808.1	805.3	802.5	808.1	807.1	809.0
5°	794.1	796.9	798.7	799.7	802.5	804.3	801.5	800.6	805.3	806.2	807.1
7.5°	782.9	787.5	792.2	794.1	797.8	799.7	798.7	798.7	804.3	806.2	806.2
10°	775.4	781.9	787.5	792.2	796.9	799.7	799.7	800.6	807.1	809.0	810.9
12.5°	773.5	781.9	789.4	795.9	799.7	804.3	805.3	808.1	814.6	817.4	817.4
15°	768.9	780.1	789.4	797.8	803.4	809.0	810.9	816.5	823.9	825.8	827.7
17.5°	760.5	771.7	782.9	793.1	800.6	805.3	810.9	816.5	825.8	828.6	829.5
20°	745.6	758.6	769.8	780.1	787.5	794.1	799.7	806.2	814.6	818.3	819.3
22.5°	723.2	736.2	747.4	758.6	766.1	771.7	777.3	784.7	793.1	796.9	796.9
25°	696.1	708.2	720.4	728.8	736.2	742.8	745.6	753.9	762.3	767.0	767.0
27.5°	661.6	672.8	684.0	693.3	698.0	703.6	708.2	715.7	722.2	726.0	729.7
30°	617.7	628.9	639.2	648.5	654.1	659.7	664.4	670.0	676.5	681.2	682.1
32.5°	570.1	579.5	589.7	599.1	604.7	606.5	611.2	616.8	622.4	626.1	627.0
35°	517.9	524.4	530.9	539.3	544.9	544.9	549.6	553.3	558.0	566.4	564.5
37.5°	456.3	465.6	470.3	473.1	476.8	480.5	481.5	486.1	491.7	493.6	496.4
40°	398.4	401.2	404.0	404.0	407.8	407.8	407.8	408.7	414.3	415.2	419.0
42.5°	340.6	340.6	337.8	335.0	335.9	335.0	330.3	330.3	333.1	336.9	336.9
45°	286.5	279.9	271.5	265.0	260.3	258.5	252.9	252.9	251.9	252.9	256.6
47.5°	240.7	229.5	215.5	202.5	197.8	194.1	185.7	182.0	180.1	181.0	182.9
50°	202.5	190.4	174.5	158.6	150.2	145.6	135.3	128.8	127.8	126.0	129.7
52.5°	174.5	159.6	142.8	124.1	115.7	108.2	97.0	91.4	87.7	87.7	88.6
55°	150.2	134.4	115.7	97.0	88.6	83.0	71.8	64.4	60.7	59.7	62.5
57.5°	129.7	114.8	96.1	77.4	69.0	62.5	51.3	44.8	42.0	40.1	41.1
60°	113.8	98.9	80.2	62.5	55.1	47.6	38.3	30.8	27.1	27.1	28.0
62.5°	98.9	84.9	68.1	51.3	44.8	38.3	28.0	21.5	18.7	17.7	18.7
65°	84.0	70.9	56.9	42.9	36.4	30.8	22.4	16.8	13.1	12.1	13.1
67.5°	68.1	57.9	45.7	34.5	28.9	24.3	16.8	12.1	9.3	8.4	9.3
70°	53.2	43.9	34.5	25.2	21.5	17.7	12.1	9.3	6.5	5.6	6.5
72.5°	38.3	31.7	24.3	17.7	14.9	12.1	8.4	6.5	4.7	3.7	4.7
75°	26.1	21.5	15.9	11.2	9.3	8.4	5.6	3.7	2.8	2.8	2.8
77.5°	16.8	13.1	10.3	7.5	5.6	4.7	2.8	1.9	1.9	1.9	1.9
80°	9.3	7.5	5.6	3.7	2.8	2.8	1.9	1.9	0.9	0.9	0.9
82.5°	5.6	3.7	2.8	1.9	1.9	0.9	0.9	0.9	0.9	0.9	0.9
85°	2.8	1.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
87.5°	0.9	0.9	0.9	0.9	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°	807.1	807.1	807.1	807.1	807.1	807.1	807.1	807.1	807.1	807.1	807.1
2.5°	805.3	806.2	803.4	807.1	804.3	808.1	808.1	804.3	805.3	803.4	807.1
5°	803.4	803.4	801.5	804.3	800.6	804.3	803.4	796.9	798.7	795.0	798.7
7.5°	803.4	801.5	798.7	801.5	796.9	799.7	795.9	789.4	787.5	782.9	782.9
10°	806.2	803.4	799.7	800.6	795.9	796.9	791.3	781.9	779.1	773.5	771.7
12.5°	812.7	809.9	804.3	806.2	799.7	799.7	792.2	781.0	775.4	767.9	766.1
15°	822.1	817.4	810.9	811.8	805.3	801.5	792.2	779.1	771.7	761.4	758.6
17.5°	823.9	819.3	810.9	810.9	802.5	797.8	786.6	771.7	762.3	752.1	746.5
20°	813.7	809.0	799.7	798.7	791.3	784.7	772.6	757.7	748.3	737.2	732.5
22.5°	792.2	786.6	778.2	777.3	769.8	766.1	753.0	738.1	728.8	717.6	713.8
25°	760.5	757.7	749.3	748.3	741.8	737.2	726.0	712.0	703.6	692.4	688.6
27.5°	723.2	720.4	712.0	712.0	704.5	701.7	691.4	678.4	671.8	661.6	656.9
30°	678.4	674.6	670.0	669.0	662.5	659.7	650.4	638.2	631.7	623.3	621.4
32.5°	625.2	622.4	619.6	618.6	612.1	609.3	602.8	590.7	585.1	577.6	574.8
35°	563.6	561.7	558.9	558.0	555.2	552.4	545.9	536.5	533.7	528.1	525.3
37.5°	492.7	494.5	492.7	492.7	489.9	490.8	485.2	479.6	476.8	473.1	471.2
40°	416.2	419.9	422.7	422.7	421.8	425.5	424.6	419.9	419.0	417.1	416.2
42.5°	338.7	340.6	346.2	349.9	349.0	358.3	359.2	363.0	365.8	363.9	364.8
45°	257.5	263.1	270.6	274.3	279.0	291.1	297.7	305.1	311.7	315.4	314.5
47.5°	185.7	192.2	200.6	206.2	214.6	229.5	246.3	255.7	265.0	269.7	274.3
50°	134.4	140.9	151.2	159.6	165.2	185.7	203.4	215.5	225.8	232.3	237.0
52.5°	94.2	101.7	112.9	120.4	128.8	148.4	168.9	182.9	194.1	202.5	207.1
55°	65.3	73.7	84.0	91.4	100.8	121.3	140.9	155.8	168.0	175.4	181.0
57.5°	45.7	53.2	63.5	70.0	79.3	98.9	118.5	133.4	145.6	153.0	159.6
60°	30.8	38.3	48.5	55.1	62.5	82.1	99.8	115.7	126.9	134.4	140.9
62.5°	21.5	28.0	38.3	44.8	51.3	68.1	84.9	98.9	110.1	118.5	124.1
65°	16.8	22.4	30.8	36.4	42.9	56.9	70.9	83.0	94.2	102.6	106.4
67.5°	12.1	17.7	24.3	28.9	33.6	45.7	57.9	67.2	77.4	84.0	88.6
70°	8.4	12.1	17.7	21.5	25.2	34.5	43.9	52.3	59.7	64.4	68.1
72.5°	6.5	8.4	12.1	14.9	17.7	24.3	31.7	38.3	43.9	47.6	51.3
75°	3.7	5.6	8.4	10.3	12.1	16.8	21.5	26.1	29.9	32.7	34.5
77.5°	1.9	2.8	4.7	5.6	7.5	10.3	14.0	16.8	19.6	21.5	23.3
80°	1.9	1.9	2.8	2.8	3.7	5.6	7.5	9.3	11.2	13.1	14.0
82.5°	0.9	0.9	1.9	1.9	1.9	2.8	3.7	5.6	6.5	7.5	8.4
85°	0.9	0.9	0.9	0.9	0.9	1.9	1.9	2.8	3.7	4.7	4.7
87.5°	0.0	0.0	0.9	0.9	0.9	0.9	0.9	1.9	1.9	1.9	2.8
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°	807.1	807.1	807.1	807.1	807.1	807.1	807.1	807.1
2.5°	804.3	806.2	805.3	807.1	804.3	803.4	805.3	802.5
5°	794.1	795.0	794.1	794.1	792.2	790.3	792.2	789.4
7.5°	778.2	778.2	775.4	775.4	771.7	769.8	769.8	768.9
10°	765.1	762.3	759.5	760.5	754.9	753.0	752.1	751.1
12.5°	758.6	756.7	752.1	752.1	746.5	744.6	743.7	742.8
15°	751.1	747.4	743.7	742.8	738.1	736.2	735.3	733.4
17.5°	738.1	735.3	730.6	730.6	726.0	725.0	723.2	722.2
20°	724.1	720.4	716.6	716.6	711.0	711.0	708.2	709.2
22.5°	704.5	701.7	698.0	698.0	693.3	692.4	689.6	688.6
25°	681.2	677.4	674.6	673.7	670.0	668.1	667.2	665.3
27.5°	650.4	647.6	644.8	642.9	638.2	637.3	634.5	635.4
30°	612.1	610.3	609.3	607.5	601.9	600.0	600.0	597.2
32.5°	570.1	567.3	565.5	562.7	558.0	557.1	554.3	555.2
35°	518.8	515.1	512.3	513.2	507.6	506.7	504.8	505.7
37.5°	465.6	461.9	458.2	457.2	452.6	452.6	449.8	449.8
40°	410.6	406.8	405.0	405.0	399.4	400.3	397.5	396.6
42.5°	361.1	357.4	356.4	355.5	352.7	351.8	349.0	349.9
45°	314.5	313.5	313.5	311.7	308.9	307.9	308.9	308.9
47.5°	273.4	274.3	273.4	273.4	271.5	273.4	271.5	272.5
50°	238.9	240.7	240.7	240.7	239.8	240.7	240.7	241.7
52.5°	209.9	212.7	211.8	212.7	211.8	213.7	212.7	213.7
55°	184.8	186.6	187.6	188.5	188.5	188.5	188.5	188.5
57.5°	161.4	164.2	165.2	166.1	166.1	168.0	166.1	166.1
60°	142.8	145.6	146.5	147.4	147.4	148.4	146.5	147.4
62.5°	126.0	128.8	128.8	129.7	129.7	129.7	127.8	128.8
65°	109.2	110.1	111.0	111.0	110.1	110.1	109.2	110.1
67.5°	90.5	91.4	90.5	90.5	89.6	89.6	87.7	88.6
70°	70.0	70.0	70.9	70.0	69.0	70.0	69.0	68.1
72.5°	52.3	52.3	52.3	51.3	51.3	50.4	51.3	51.3
75°	35.5	35.5	36.4	36.4	36.4	36.4	35.5	35.5
77.5°	23.3	23.3	23.3	23.3	24.3	23.3	23.3	23.3
80°	14.9	14.9	15.9	15.9	14.9	14.9	14.9	14.9
82.5°	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
85°	5.6	5.6	5.6	5.6	4.7	4.7	4.7	4.7
87.5°	2.8	2.8	2.8	2.8	2.8	2.8	1.9	1.9
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)