

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: P252128

Luminaire Tested: **LD6B10D010 EU6B10208027 6LBSW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252128  
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: LD6B10D010 EU6B10208027 6LBSW1LI  
Description: PORTFOLIO 6 INCH SINGLE 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: 1294.0 lumens  
Efficiency: N/A  
Efficacy: 128.8 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

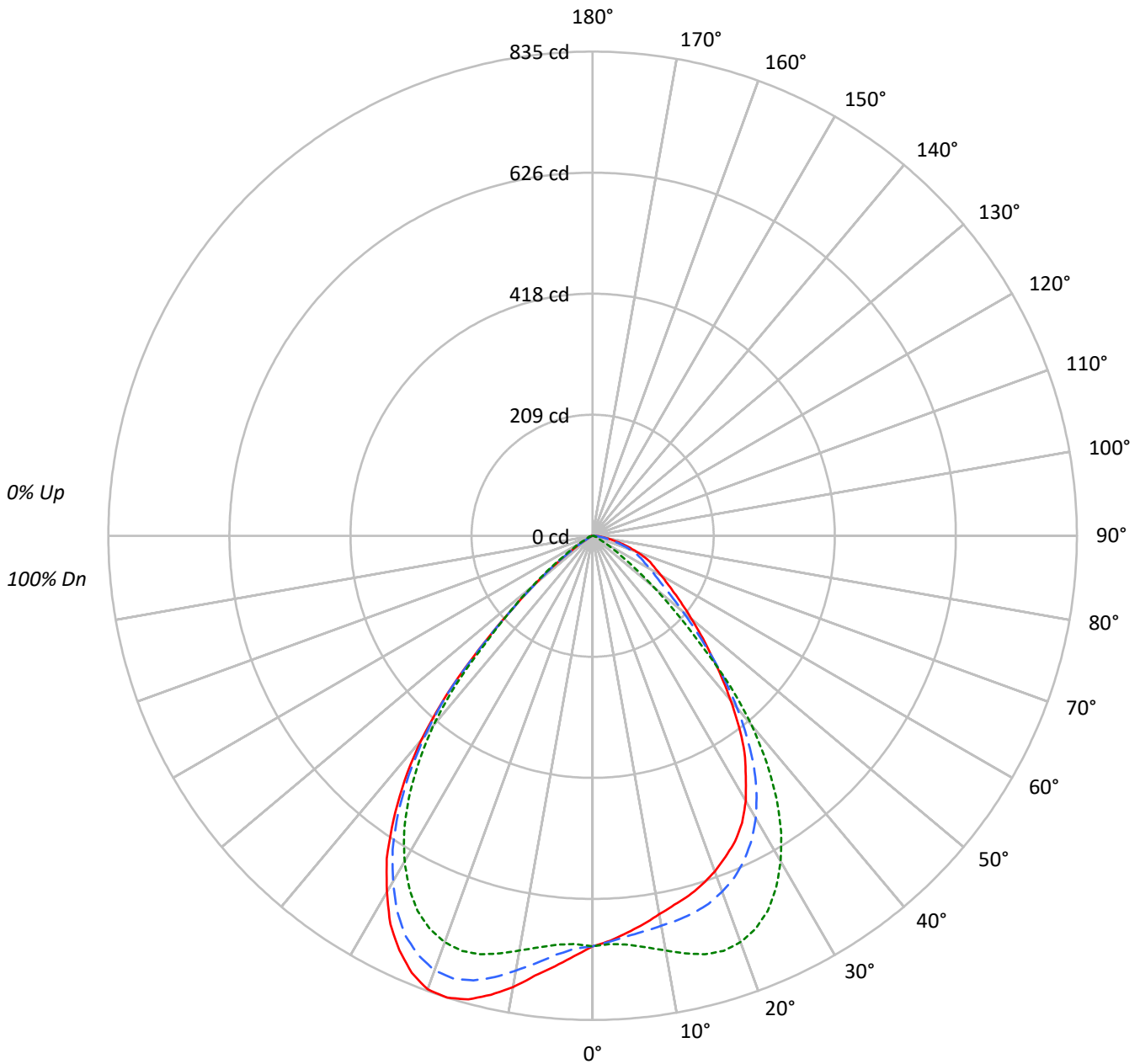
Input Watts (W): 10.05  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	46184	46184	46184
5°	44985	46360	48796
10°	43895	48109	52368
15°	43382	50467	55905
20°	42760	51779	57792
25°	41852	51397	56760
30°	39768	48846	53434
35°	36381	44035	47707
40°	31469	36374	39134
45°	26535	23850	25603
50°	22532	13804	12981
55°	19553	6620	5005
60°	17667	3092	1240
65°	17135	1775	417
70°	15355	1412	382
75°	12629	1033	176
80°	9393	526	0
85°	8084	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.4	5.3
10°-20°	208.4	16.1
20°-30°	318.4	24.6
30°-40°	333.0	25.7
40°-50°	216.0	16.7
50°-60°	85.8	6.6
60°-70°	40.7	3.1
70°-80°	19.4	1.5
80°-90°	3.9	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°	595.2	46.0
0°-40°	928.2	71.7
0°-60°	1230.0	95.1
0°-90°	1294.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1294.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	708	708	708	708	708	
5°	687	693	708	726	745	65
15°	642	673	747	794	828	181
25°	581	618	714	762	788	266
35°	457	485	553	585	599	283
45°	288	285	258	274	278	224
55°	172	146	58	45	44	156
65°	111	92	12	3	3	108
75°	50	41	4	1	1	54
85°	11	7	0	0	0	13
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°	707.9	707.9	707.9	707.9	707.9	707.9	707.9	707.9	707.9	707.9	707.9
2.5°	699.1	700.5	693.0	691.0	696.4	698.4	699.1	697.1	697.8	700.5	700.5
5°	686.9	688.3	681.5	679.5	684.9	686.3	688.3	687.6	689.6	693.7	693.0
7.5°	675.4	677.5	670.0	667.3	674.1	677.5	678.8	678.8	681.5	686.9	687.6
10°	662.6	665.3	658.5	657.2	664.6	668.0	668.7	670.0	674.1	681.5	682.9
12.5°	651.7	654.5	649.7	647.7	655.8	659.2	660.5	663.3	668.0	677.5	678.8
15°	642.3	644.3	638.9	637.5	645.7	649.7	650.4	654.5	660.5	671.4	673.4
17.5°	630.1	631.4	627.4	626.0	634.2	638.2	638.9	643.6	651.1	661.9	665.3
20°	615.9	617.2	613.2	611.8	619.9	624.7	625.4	629.4	638.2	649.7	653.1
22.5°	599.0	601.7	596.9	595.6	603.7	607.8	609.8	613.2	622.0	633.5	638.2
25°	581.4	581.4	578.0	577.3	584.7	589.5	588.8	593.5	602.3	613.8	617.9
27.5°	558.3	557.7	554.3	553.6	561.7	565.8	564.4	569.2	577.3	588.8	592.9
30°	527.9	529.2	524.5	523.2	529.9	536.7	536.0	540.8	548.9	559.7	562.4
32.5°	491.3	492.7	492.0	490.0	496.1	499.5	501.5	504.9	511.7	523.2	525.9
35°	456.8	454.8	452.1	452.1	458.2	463.6	461.6	465.6	472.4	483.9	484.6
37.5°	414.2	413.5	412.2	410.8	417.6	418.9	419.6	422.3	428.4	437.9	436.5
40°	369.5	370.2	369.5	366.8	370.9	376.3	375.6	377.0	382.4	389.2	387.1
42.5°	327.6	327.6	327.6	324.9	329.6	332.3	333.7	333.0	334.3	340.4	337.7
45°	287.6	288.3	287.6	287.0	287.6	289.0	287.6	287.0	287.0	289.0	284.9
47.5°	253.1	253.1	251.1	249.1	251.1	251.8	249.7	247.7	247.0	246.4	239.6
50°	222.0	221.3	220.6	217.2	219.3	220.0	217.2	215.9	213.2	209.8	201.7
52.5°	194.9	194.2	193.6	190.2	191.5	192.2	189.5	186.8	183.4	180.7	170.6
55°	171.9	171.2	171.2	169.2	167.8	169.2	166.5	164.5	159.7	156.3	146.2
57.5°	152.3	152.3	150.9	148.9	149.6	149.6	146.9	144.2	140.1	136.0	127.9
60°	135.4	135.4	135.4	133.3	133.3	133.3	132.0	129.3	125.9	121.8	113.7
62.5°	121.8	121.8	121.1	119.1	119.8	119.8	118.4	115.7	112.3	109.6	101.5
65°	111.0	111.0	111.0	109.0	109.0	109.6	108.3	105.6	102.9	99.5	92.0
67.5°	97.5	96.8	96.8	95.4	96.1	96.8	95.4	93.4	90.0	88.0	81.2
70°	80.5	81.2	81.9	79.9	80.5	80.5	79.9	77.8	75.8	73.8	67.7
72.5°	65.6	65.6	65.0	64.3	64.3	65.0	63.6	61.6	60.2	58.9	54.1
75°	50.1	49.4	50.1	48.7	48.7	48.7	47.4	46.7	46.0	44.0	40.6
77.5°	36.5	35.9	35.9	34.5	35.2	35.2	34.5	33.2	31.8	31.1	28.4
80°	25.0	25.0	25.0	24.4	24.4	23.7	23.7	23.0	21.7	21.0	19.6
82.5°	16.9	16.9	16.9	16.2	16.2	16.2	15.6	14.9	14.2	13.5	12.2
85°	10.8	10.8	10.8	10.2	10.2	10.2	9.5	9.5	8.8	8.1	6.8
87.5°	6.1	6.1	6.1	5.4	5.4	5.4	5.4	5.4	4.7	4.1	3.4
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°	707.9	707.9	707.9	707.9	707.9	707.9	707.9	707.9	707.9	707.9	707.9
2.5°	705.2	695.7	701.8	701.8	699.8	705.2	708.6	711.3	710.6	704.5	703.9
5°	699.8	691.7	698.4	699.1	697.1	704.5	709.3	712.7	713.3	707.9	708.6
7.5°	695.7	689.0	697.8	700.5	699.8	706.6	712.0	717.4	720.1	716.0	716.7
10°	693.7	688.3	697.8	701.8	702.5	710.0	718.1	725.5	728.9	726.2	728.2
12.5°	691.0	687.6	698.4	704.5	707.2	714.7	724.8	733.6	739.1	737.7	741.8
15°	688.3	685.6	698.4	707.2	710.6	717.4	728.9	741.8	747.9	747.2	752.6
17.5°	681.5	680.8	694.4	703.9	708.6	716.7	727.5	743.1	749.2	750.6	757.3
20°	670.7	670.7	685.6	695.7	701.2	708.6	722.1	737.0	744.5	745.8	753.3
22.5°	655.8	657.2	671.4	681.5	689.6	695.1	709.3	724.8	731.6	733.6	741.8
25°	636.2	637.5	651.1	661.2	670.0	676.1	689.6	703.9	712.0	714.0	720.1
27.5°	610.5	613.2	626.0	636.2	643.6	647.7	661.9	676.8	682.9	684.9	691.0
30°	580.7	581.4	594.2	603.0	610.5	613.8	626.0	641.6	646.3	648.4	657.2
32.5°	544.1	543.5	555.6	563.8	569.9	573.9	586.8	596.9	601.7	605.0	609.8
35°	500.1	499.5	508.3	517.7	522.5	523.8	536.7	547.5	550.2	552.9	559.0
37.5°	450.7	450.7	458.2	462.9	468.3	470.4	476.5	488.6	493.4	492.7	497.4
40°	398.6	395.9	401.3	406.1	407.4	408.1	414.2	423.7	427.1	427.1	430.4
42.5°	343.8	339.7	340.4	343.1	344.5	339.7	343.8	349.9	347.9	350.6	351.3
45°	285.6	279.5	276.8	270.7	272.1	267.3	264.6	266.0	265.3	258.5	259.9
47.5°	238.2	227.4	222.7	213.9	211.8	206.4	203.0	196.9	191.5	191.5	188.1
50°	198.3	187.5	178.0	167.8	164.5	159.7	152.3	144.2	140.1	136.0	132.7
52.5°	166.5	155.0	143.5	132.7	127.9	121.8	111.7	103.5	96.1	92.0	88.0
55°	140.8	127.9	115.7	104.2	98.1	92.0	81.9	72.4	63.6	58.2	54.8
57.5°	121.1	109.0	96.1	83.9	78.5	71.7	60.9	50.8	42.6	36.5	33.2
60°	106.9	94.8	83.2	70.4	65.0	58.2	46.7	37.2	29.1	23.7	19.6
62.5°	94.8	83.9	71.7	60.2	54.8	48.1	37.2	27.7	20.3	14.9	11.5
65°	86.0	75.1	65.0	53.5	48.7	42.0	31.8	23.0	16.2	11.5	8.1
67.5°	75.8	66.3	56.2	46.7	42.0	36.5	27.1	19.6	13.5	9.5	6.8
70°	63.6	56.2	47.4	38.6	35.2	30.5	22.3	16.2	10.8	7.4	5.4
72.5°	50.8	44.7	37.9	31.1	28.4	23.7	18.3	12.9	8.1	5.4	4.1
75°	38.6	33.8	28.4	23.7	21.0	18.3	13.5	9.5	6.1	4.1	2.7
77.5°	26.4	24.4	20.3	16.2	14.9	12.9	8.8	6.1	4.1	2.7	1.4
80°	18.3	16.2	13.5	10.8	9.5	8.1	5.4	4.1	2.0	1.4	0.7
82.5°	11.5	9.5	8.1	6.8	6.1	4.7	3.4	2.0	1.4	0.7	0.7
85°	6.1	5.4	4.7	3.4	3.4	2.7	2.0	1.4	0.7	0.0	0.0
87.5°	3.4	2.7	2.0	1.4	1.4	0.7	0.7	0.7	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°	707.9	707.9	707.9	707.9	707.9	707.9	707.9	707.9	707.9	707.9	707.9
2.5°	712.0	712.0	711.3	719.4	710.0	719.4	714.7	719.4	712.7	712.0	712.7
5°	717.4	719.4	720.1	727.5	718.7	730.3	726.2	730.3	725.5	726.9	728.9
7.5°	728.2	731.6	730.9	740.4	731.6	744.5	741.8	747.9	743.1	744.5	747.2
10°	740.4	744.5	745.1	754.6	746.5	762.1	758.7	765.4	761.4	763.4	766.8
12.5°	754.6	759.4	760.0	770.9	762.1	778.3	776.3	783.0	779.7	781.7	785.8
15°	765.4	772.2	773.6	784.4	774.9	791.8	790.5	799.3	793.9	797.3	800.6
17.5°	770.9	777.0	779.7	789.8	781.7	798.6	797.3	804.7	800.6	804.0	808.1
20°	767.5	774.9	777.0	787.1	779.0	795.9	793.9	801.3	797.3	800.0	804.0
22.5°	755.3	762.7	765.4	774.9	767.5	783.0	782.4	789.1	783.7	787.1	790.5
25°	733.6	741.8	743.1	751.9	743.8	760.0	758.7	766.1	762.1	764.1	768.8
27.5°	702.5	712.0	714.0	721.5	715.4	728.9	728.9	735.0	730.3	730.3	735.0
30°	665.3	674.8	676.1	682.2	676.8	689.0	689.6	695.7	688.3	692.4	693.0
32.5°	619.9	626.0	630.1	635.5	627.4	642.9	640.9	645.7	641.6	641.6	645.0
35°	565.1	572.6	574.6	581.4	574.6	586.8	586.8	589.5	585.4	585.4	590.8
37.5°	505.6	511.0	511.7	518.4	513.0	523.2	522.5	524.5	520.4	523.2	523.2
40°	435.9	439.9	441.3	444.6	444.0	451.4	450.7	452.1	450.1	450.7	452.1
42.5°	354.6	360.1	362.8	365.5	361.4	371.6	369.5	371.6	370.9	371.6	373.6
45°	261.2	265.3	267.3	268.0	266.7	272.7	277.5	273.4	274.1	272.7	275.5
47.5°	188.8	189.5	188.1	192.2	188.8	191.5	192.9	193.6	189.5	188.8	191.5
50°	129.3	132.7	127.9	129.9	129.3	132.0	130.6	131.3	127.2	129.3	127.9
52.5°	86.0	85.3	83.9	84.6	83.2	83.2	83.2	84.6	81.9	80.5	79.2
55°	52.1	50.8	48.1	47.4	47.4	48.1	46.7	45.3	45.3	44.7	44.7
57.5°	30.5	28.4	27.1	26.4	25.0	24.4	23.7	23.7	22.3	22.3	22.3
60°	16.9	14.9	13.5	12.2	12.2	11.5	10.8	10.2	10.2	10.2	9.5
62.5°	8.8	7.4	6.1	5.4	5.4	4.7	4.1	4.1	4.1	4.1	3.4
65°	6.1	4.7	4.1	3.4	3.4	2.7	2.7	2.7	2.7	2.7	2.7
67.5°	4.7	4.1	3.4	2.7	2.7	2.7	2.0	2.0	2.0	2.0	2.0
70°	4.1	2.7	2.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
72.5°	2.7	2.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
75°	2.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
77.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0
80°	0.7	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°	707.9	707.9	707.9	707.9	707.9	707.9	707.9	707.9
2.5°	718.7	718.1	718.7	720.1	717.4	725.5	721.5	725.5
5°	734.3	735.0	735.7	737.7	734.3	744.5	739.1	745.1
7.5°	754.6	755.3	756.0	758.0	756.0	766.1	760.0	765.4
10°	775.6	777.0	777.0	780.3	778.3	787.8	783.7	790.5
12.5°	795.2	796.6	797.9	800.0	798.6	808.8	805.4	810.8
15°	810.8	813.5	814.2	816.9	815.5	826.4	822.3	827.7
17.5°	818.2	820.9	820.9	824.3	823.0	834.5	829.1	835.2
20°	814.2	816.2	816.9	820.3	818.9	830.4	825.0	832.4
22.5°	801.3	802.0	802.7	806.1	805.4	815.5	810.8	815.5
25°	777.6	779.7	779.0	781.7	781.7	789.8	784.4	788.5
27.5°	743.8	745.8	745.8	749.2	746.5	754.6	749.2	755.3
30°	702.5	704.5	703.2	705.9	703.2	711.3	707.2	709.3
32.5°	653.1	653.1	653.8	654.5	653.1	660.5	656.5	660.5
35°	594.2	595.6	596.3	596.9	595.6	601.0	596.3	599.0
37.5°	527.9	531.3	530.6	531.3	529.2	536.0	532.0	533.3
40°	456.8	456.8	456.2	457.5	455.5	460.9	458.2	459.5
42.5°	374.3	376.3	373.6	377.0	371.6	379.0	376.3	374.3
45°	280.9	278.2	277.5	278.2	276.1	276.8	278.8	277.5
47.5°	191.5	191.5	190.2	188.1	190.9	191.5	188.8	188.8
50°	128.6	128.6	127.2	126.6	127.9	127.2	125.9	127.9
52.5°	81.9	79.2	79.2	80.5	79.2	77.8	79.9	78.5
55°	44.7	43.3	43.3	44.7	43.3	43.3	42.6	44.0
57.5°	21.7	22.3	21.7	21.7	21.7	21.7	21.0	21.7
60°	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
62.5°	4.1	4.1	3.4	3.4	3.4	3.4	3.4	3.4
65°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
67.5°	2.0	2.0	2.0	2.0	2.0	2.7	2.0	2.0
70°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
72.5°	2.0	2.0	2.7	2.7	2.7	2.7	2.7	2.7
75°	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7
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)