

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: P136481

Luminaire Tested: **LD6A10D010TE ERW6A10830 6LW121LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P136481  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23360)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD6A10D010TE ERW6A10830 6LW121LI  
Description: PORTFOLIO 6 INCH 60 DEGREE CUTOFF RECESSED DOUBLE WALL WASH LUMINAIRE  
SPECULAR CLEAR TRIM AND SPECULAR CLEAR KICKER  
Light Source: (1) HIGH LUMEN LED 3000K  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1197.0 lumens  
Efficiency: N/A  
Efficacy: 85.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.24 / 1.14  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

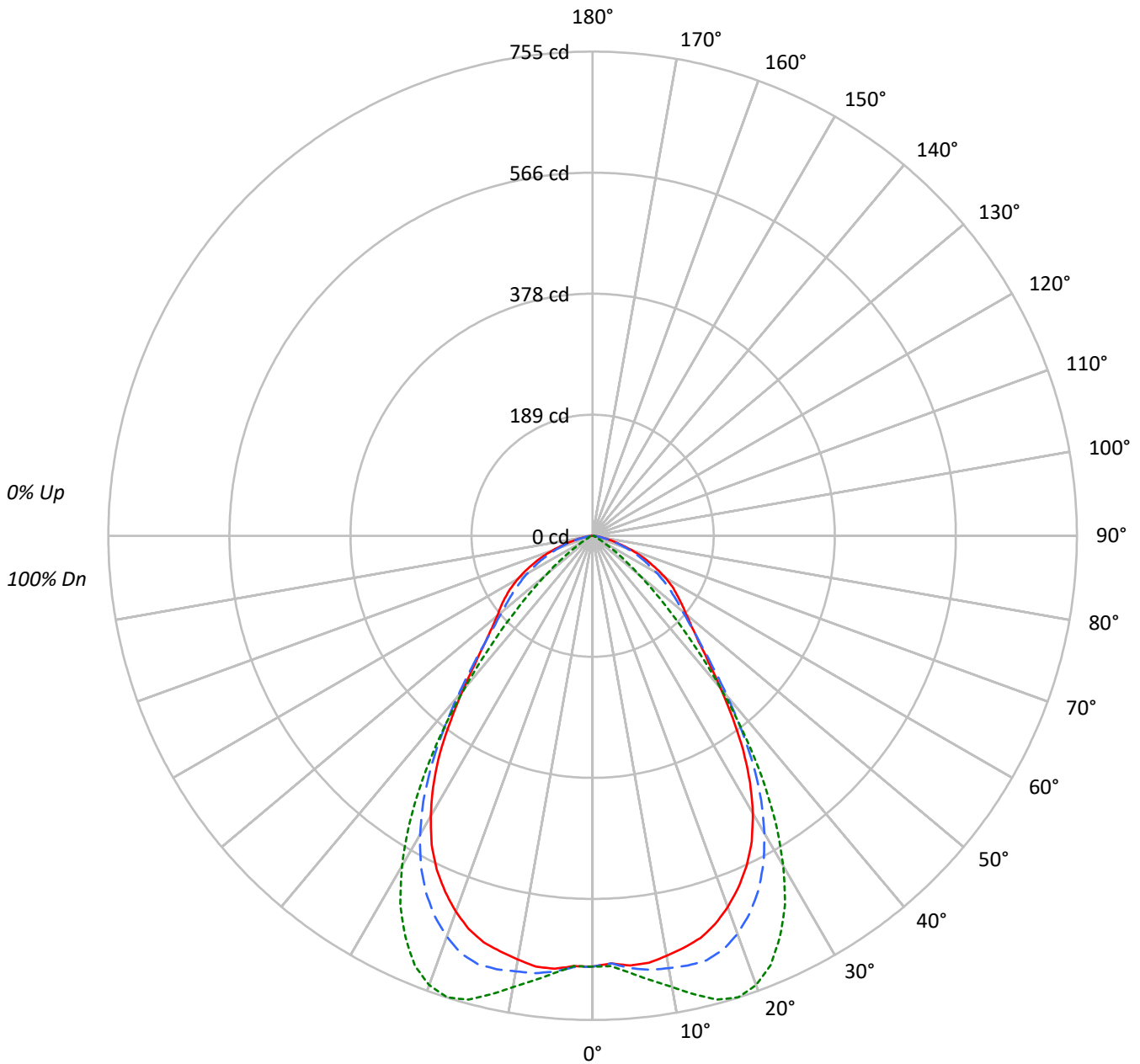
Input Watts (W): 14  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89																			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79																			
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70																			
4	90	80	73	67	88	79	72	67	77	71	66	74	69	65	72	68	65	63																			
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56																			
6	78	67	60	54	77	66	59	54	65	58	54	63	57	53	62	57	53	51																			
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46																			
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42																			
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	40	39																			
10	61	49	42	38	60	49	42	38	48	42	38	47	42	37	46	41	37	36																			

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

	0°	90°	180°
0°	43822	43822	43822
5°	44048	44834	44382
10°	44048	47334	44445
15°	43862	50575	44328
20°	42767	51751	43302
25°	40888	49713	41384
30°	37629	44793	38013
35°	32614	36708	33092
40°	26418	26418	26776
45°	21581	16755	21977
50°	19305	9561	19650
55°	18222	4868	18813
60°	17106	2127	17550
65°	14943	1189	15468
70°	12094	973	12590
75°	8419	655	8646
80°	5147	338	5147
85°	2545	674	2545



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.3	5.5
10°-20°	195.8	16.4
20°-30°	284.8	23.8
30°-40°	270.7	22.6
40°-50°	175.4	14.7
50°-60°	110.0	9.2
60°-70°	65.8	5.5
70°-80°	25.7	2.1
80°-90°	3.5	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°	546.0	45.6
0°-40°	816.6	68.2
0°-60°	1102.0	92.1
0°-90°	1197.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1197.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	672	672	672	672	672	
5°	673	677	685	682	678	64
15°	649	685	749	691	656	182
25°	568	611	691	614	575	260
35°	410	437	461	439	416	254
45°	234	237	182	238	238	185
55°	160	147	43	149	165	144
65°	97	85	8	86	100	96
75°	33	29	3	30	34	37
85°	3	3	1	3	3	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	671.7	671.7	671.7	671.7	671.7	671.7	671.7	671.7	671.7	671.7	671.7
2.5°	667.4	663.1	675.1	668.3	669.1	677.7	670.9	668.3	676.8	667.4	671.7
5°	672.6	669.1	681.1	675.1	676.0	684.6	678.6	676.0	685.4	676.8	681.1
7.5°	671.7	669.1	680.3	675.1	676.0	686.3	680.3	679.4	690.6	682.8	688.8
10°	664.9	661.4	673.4	669.1	670.9	682.0	676.8	676.8	689.7	684.6	693.1
12.5°	658.0	654.6	666.6	663.1	664.9	676.8	673.4	675.1	689.7	686.3	697.4
15°	649.4	646.0	658.9	655.4	657.1	670.0	668.3	670.0	686.3	685.4	698.3
17.5°	634.9	633.2	644.3	642.6	644.3	657.1	656.3	658.9	676.8	676.8	693.1
20°	616.0	613.4	625.4	623.7	624.6	637.4	637.4	640.0	658.9	660.6	676.8
22.5°	593.7	592.0	604.0	601.5	603.2	615.2	615.2	617.7	635.7	638.3	655.4
25°	568.0	566.3	577.5	576.6	577.5	589.5	588.6	592.0	609.2	610.9	627.2
27.5°	537.2	534.6	545.8	545.8	546.6	557.8	557.8	559.5	574.9	576.6	592.0
30°	499.5	496.9	507.2	508.1	508.1	519.2	519.2	520.1	534.6	535.5	549.2
32.5°	456.7	456.7	464.4	465.2	465.2	475.5	476.4	476.4	489.2	489.2	500.4
35°	409.5	410.4	416.4	417.2	418.1	427.5	427.5	426.7	437.8	437.0	446.4
37.5°	359.0	359.0	365.0	365.8	365.8	374.4	374.4	373.6	383.0	380.4	387.3
40°	310.2	310.2	315.3	317.0	316.1	323.0	323.0	322.1	329.0	325.6	329.0
42.5°	267.3	269.0	272.5	273.3	272.5	278.5	277.6	276.7	281.9	276.7	277.6
45°	233.9	235.6	238.2	239.0	238.2	242.5	241.6	239.9	242.5	237.3	234.8
47.5°	209.1	209.9	214.2	213.3	212.5	215.9	215.9	212.5	213.3	206.5	201.3
50°	190.2	191.1	194.5	194.5	192.8	196.2	194.5	191.1	190.2	182.5	174.8
52.5°	174.8	175.6	179.1	179.1	177.4	179.9	178.2	173.1	172.2	164.5	155.1
55°	160.2	161.1	164.5	164.5	162.8	164.5	161.9	157.6	155.9	147.4	137.1
57.5°	147.4	146.5	149.1	149.1	147.4	148.2	146.5	142.2	138.8	131.1	120.8
60°	131.1	130.2	131.9	131.9	130.2	131.1	129.4	124.2	122.5	114.8	104.5
62.5°	113.1	113.1	114.8	114.8	113.1	113.1	112.2	107.1	105.4	98.5	90.0
65°	96.8	96.8	98.5	98.5	96.8	97.7	96.0	92.5	90.8	84.8	77.1
67.5°	80.5	80.5	81.4	81.4	80.5	80.5	79.7	77.1	74.5	70.3	63.4
70°	63.4	63.4	64.3	64.3	63.4	63.4	63.4	60.8	60.0	55.7	50.5
72.5°	47.1	47.1	48.0	48.0	48.0	48.8	48.0	46.3	44.6	42.0	37.7
75°	33.4	33.4	33.4	34.3	33.4	33.4	34.3	32.6	31.7	29.1	26.6
77.5°	22.3	22.3	22.3	22.3	22.3	23.1	22.3	22.3	21.4	19.7	18.0
80°	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	12.9	12.9	11.1
82.5°	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	6.9	6.0
85°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	2.6
87.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	671.7	671.7	671.7	671.7	671.7	671.7	671.7	671.7	671.7	671.7	671.7
2.5°	670.9	671.7	671.7	674.3	676.8	670.0	673.4	671.7	670.0	676.8	672.6
5°	682.0	682.8	682.8	686.3	689.7	682.0	685.4	684.6	682.8	688.8	684.6
7.5°	690.6	693.1	694.8	699.1	703.4	696.6	700.8	699.1	698.3	704.3	698.3
10°	696.6	701.7	704.3	711.1	717.1	710.3	716.3	714.5	713.7	718.8	712.0
12.5°	703.4	710.3	717.1	724.8	733.4	727.4	735.1	732.5	732.5	736.8	728.3
15°	707.7	716.3	725.7	736.8	747.1	742.8	751.4	748.8	748.8	752.2	742.8
17.5°	703.4	714.5	725.7	738.5	750.5	748.0	757.4	754.8	754.0	757.4	746.2
20°	688.8	701.7	714.5	727.4	741.1	739.4	749.7	745.4	746.2	748.0	736.8
22.5°	665.7	679.4	692.3	706.0	718.8	718.0	727.4	724.8	724.0	726.5	714.5
25°	638.3	650.3	662.3	674.3	687.1	685.4	694.8	690.6	691.4	692.3	682.0
27.5°	601.5	612.6	622.0	632.3	644.3	641.7	651.1	649.4	646.9	647.7	639.2
30°	556.0	565.5	572.3	580.9	590.3	587.7	596.3	594.6	592.9	592.9	587.7
32.5°	504.6	511.5	515.8	521.8	528.6	526.1	532.9	531.2	529.5	529.5	526.1
35°	447.2	451.5	451.5	454.9	460.1	455.8	461.8	460.9	458.4	459.2	458.4
37.5°	384.7	386.4	383.0	383.0	386.4	380.4	385.5	385.5	383.0	383.8	383.8
40°	323.9	323.0	316.1	312.7	312.7	306.7	311.0	310.2	308.4	309.3	311.0
42.5°	269.9	264.7	255.3	248.5	246.8	239.9	242.5	241.6	239.9	241.6	244.2
45°	224.5	215.0	202.2	192.8	188.5	181.6	182.5	181.6	180.8	182.5	186.8
47.5°	188.5	175.6	159.4	147.4	141.4	133.7	133.7	132.8	132.8	137.1	139.7
50°	160.2	144.8	125.9	112.2	103.7	96.8	95.1	94.2	95.1	98.5	103.7
52.5°	138.8	119.9	99.4	84.8	75.4	67.7	66.0	65.1	66.0	69.4	74.5
55°	119.9	100.2	78.8	62.5	52.3	45.4	42.8	42.8	42.8	47.1	52.3
57.5°	102.8	83.1	61.7	45.4	36.0	29.1	26.6	25.7	27.4	30.0	35.1
60°	88.2	69.4	48.8	34.3	24.8	18.8	16.3	16.3	16.3	19.7	24.8
62.5°	75.4	58.3	39.4	25.7	18.0	12.9	10.3	10.3	11.1	12.9	18.0
65°	64.3	49.7	33.4	22.3	14.6	10.3	8.6	7.7	8.6	10.3	14.6
67.5°	53.1	41.1	28.3	18.8	12.9	8.6	7.7	6.9	6.9	9.4	12.0
70°	42.0	32.6	23.1	15.4	10.3	6.9	6.0	5.1	6.0	7.7	10.3
72.5°	31.7	24.8	17.1	12.0	7.7	6.0	4.3	4.3	4.3	6.0	7.7
75°	22.3	18.0	12.9	8.6	5.1	3.4	3.4	2.6	3.4	4.3	5.1
77.5°	14.6	12.0	8.6	5.1	3.4	2.6	1.7	1.7	1.7	2.6	3.4
80°	9.4	7.7	5.1	3.4	2.6	1.7	0.9	0.9	0.9	1.7	1.7
82.5°	5.1	4.3	2.6	1.7	1.7	0.9	0.9	0.9	0.9	0.9	0.9
85°	2.6	1.7	1.7	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9
87.5°	0.9	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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	671.7	671.7	671.7	671.7	671.7	671.7	671.7	671.7	671.7	671.7	671.7
2.5°	673.4	670.9	674.3	676.8	676.0	673.4	677.7	670.9	673.4	670.9	666.6
5°	685.4	682.8	685.4	687.1	686.3	682.0	685.4	679.4	681.1	677.7	673.4
7.5°	698.3	694.8	695.7	696.6	694.0	688.0	690.6	682.8	683.7	679.4	674.3
10°	710.3	705.1	704.3	702.6	697.4	689.7	690.6	681.1	680.3	674.3	668.3
12.5°	725.7	717.1	713.7	710.3	702.6	692.3	690.6	679.4	677.7	670.9	664.0
15°	736.8	727.4	721.4	714.5	704.3	691.4	688.0	675.1	671.7	664.0	657.1
17.5°	739.4	727.4	718.8	710.3	698.3	682.8	677.7	664.0	659.7	651.1	644.3
20°	728.3	715.4	706.0	694.8	682.8	664.9	659.7	645.1	640.0	632.3	625.4
22.5°	706.8	692.3	682.8	671.7	659.7	642.6	636.6	622.9	617.7	610.0	603.2
25°	676.0	662.3	652.9	642.6	631.4	614.3	609.2	596.3	592.0	584.3	577.5
27.5°	633.2	620.3	615.2	604.9	594.6	580.0	574.9	563.8	559.5	554.3	546.6
30°	581.7	570.6	568.0	558.6	550.9	538.1	533.8	524.3	520.1	515.8	508.9
32.5°	522.6	514.1	514.1	506.4	501.2	490.9	487.5	479.8	476.4	472.9	466.9
35°	455.8	449.8	453.2	448.1	445.5	438.7	436.1	430.1	427.5	425.0	419.0
37.5°	384.7	380.4	387.3	388.1	388.1	382.1	380.4	377.0	375.3	372.7	367.6
40°	314.4	313.6	323.9	325.6	330.7	327.3	328.1	325.6	323.9	322.1	318.7
42.5°	249.3	252.7	265.6	273.3	278.5	278.5	281.0	280.2	279.3	277.6	275.0
45°	193.6	200.5	215.9	225.3	235.6	238.2	242.5	242.5	243.3	242.5	239.9
47.5°	148.2	158.5	176.5	191.1	202.2	207.3	213.3	215.0	215.9	215.9	214.2
50°	112.2	125.1	145.7	161.9	177.4	184.2	191.1	193.6	197.1	196.2	194.5
52.5°	84.8	99.4	121.7	141.4	157.6	165.4	173.1	176.5	179.9	179.9	179.1
55°	62.5	78.0	102.0	122.5	139.7	149.1	156.8	160.2	164.5	165.4	164.5
57.5°	45.4	60.8	84.0	106.2	122.5	132.8	140.5	143.9	148.2	149.1	149.1
60°	33.4	48.8	71.1	91.7	107.1	117.4	123.4	127.7	131.1	132.8	132.8
62.5°	25.7	39.4	60.0	78.8	92.5	101.1	107.1	110.5	114.0	114.8	115.7
65°	21.4	33.4	50.5	66.8	78.8	86.5	91.7	95.1	97.7	98.5	98.5
67.5°	18.0	28.3	42.0	54.8	65.1	71.1	75.4	78.0	80.5	81.4	81.4
70°	14.6	22.3	33.4	43.7	51.4	56.5	60.0	62.5	64.3	64.3	64.3
72.5°	11.1	17.1	24.8	32.6	38.6	42.8	45.4	46.3	48.0	48.0	48.0
75°	7.7	12.0	18.0	23.1	26.6	30.0	31.7	32.6	33.4	34.3	33.4
77.5°	5.1	7.7	11.1	14.6	18.0	19.7	20.6	21.4	22.3	22.3	22.3
80°	3.4	5.1	6.9	9.4	11.1	12.0	12.9	12.9	13.7	13.7	13.7
82.5°	1.7	2.6	4.3	5.1	6.0	6.9	6.9	6.9	7.7	7.7	6.9
85°	0.9	0.9	1.7	2.6	2.6	3.4	3.4	3.4	3.4	3.4	3.4
87.5°	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





TEST NUMBER: P136481

CATALOG NUMBER: LD6A10D010TE ERW6A10830 6LW121LI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	671.7	671.7	671.7	671.7
2.5°	668.3	670.0	663.1	671.7
5°	674.3	676.0	669.1	677.7
7.5°	675.1	676.0	669.1	677.7
10°	669.1	669.1	662.3	670.9
12.5°	664.0	663.1	655.4	664.0
15°	656.3	655.4	647.7	656.3
17.5°	643.4	642.6	634.9	642.6
20°	623.7	622.9	616.0	623.7
22.5°	602.3	600.6	593.7	600.6
25°	577.5	575.8	568.9	574.9
27.5°	545.8	544.1	537.2	543.2
30°	508.1	505.5	500.4	504.6
32.5°	465.2	463.5	457.5	462.7
35°	418.1	415.5	411.3	415.5
37.5°	366.7	365.0	360.7	363.3
40°	317.0	316.1	312.7	314.4
42.5°	274.2	272.5	269.9	271.6
45°	239.9	239.0	236.5	238.2
47.5°	214.2	213.3	210.8	212.5
50°	195.3	194.5	192.8	193.6
52.5°	179.9	179.1	177.4	179.9
55°	166.2	165.4	162.8	165.4
57.5°	150.8	149.9	147.4	150.8
60°	133.7	133.7	131.1	134.5
62.5°	116.5	116.5	114.8	117.4
65°	100.2	99.4	98.5	100.2
67.5°	82.3	81.4	81.4	83.1
70°	65.1	64.3	64.3	66.0
72.5°	48.8	48.0	48.0	48.8
75°	34.3	33.4	33.4	34.3
77.5°	22.3	22.3	22.3	22.3
80°	13.7	13.7	13.7	13.7
82.5°	7.7	7.7	6.9	7.7
85°	3.4	3.4	3.4	3.4
87.5°	0.9	0.9	0.9	0.9
90°	0.0	0.0	0.0	0.0



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— 0°-180°    - - 45°-225°    - - - - 90°-270°















(END OF REPORT)