

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: P136487

Luminaire Tested: **LD6A10D010TE ERW6A10940 6LW121LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P136487  
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 ERW6A10940 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 4000K  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1150.3 lumens  
Efficiency: N/A  
Efficacy: 82.2 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

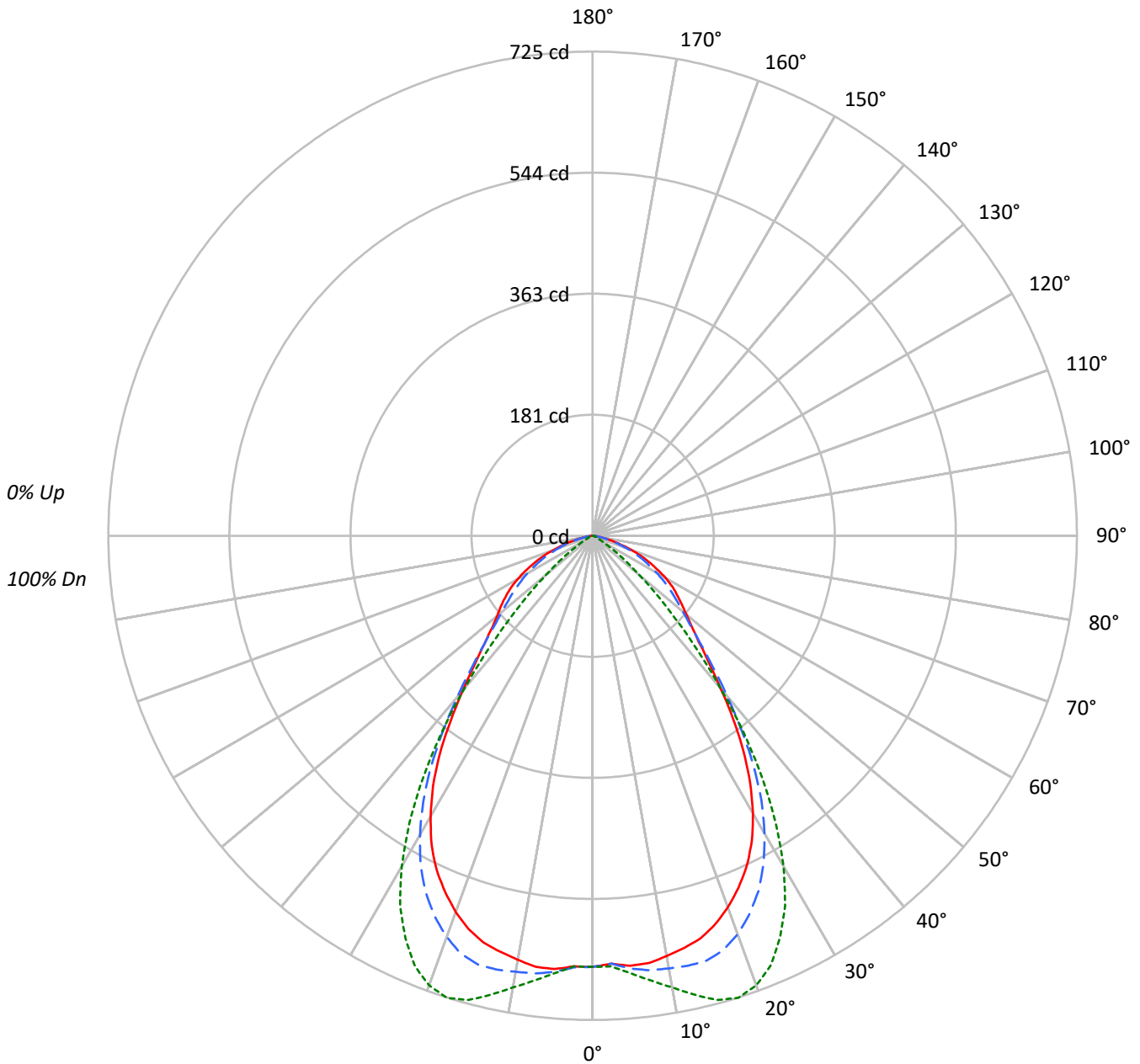
Input Watts (W): 14  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	42106	42106	42106
5°	42326	43079	42647
10°	42325	45492	42703
15°	42153	48603	42599
20°	41094	49731	41615
25°	39289	47769	39772
30°	36160	43045	36529
35°	31340	35274	31802
40°	25388	25388	25729
45°	20732	16100	21119
50°	18554	9196	18888
55°	17505	4675	18074
60°	16428	2036	16871
65°	14357	1142	14866
70°	11636	954	12094
75°	8091	630	8318
80°	4922	301	4922
85°	2470	599	2470



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.8	5.5
10°-20°	188.2	16.4
20°-30°	273.7	23.8
30°-40°	260.1	22.6
40°-50°	168.5	14.7
50°-60°	105.7	9.2
60°-70°	63.2	5.5
70°-80°	24.7	2.1
80°-90°	3.4	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°	524.6	45.6
0°-40°	784.8	68.2
0°-60°	1059.0	92.1
0°-90°	1150.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1150.3	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	645	645	645	645	645	
5°	646	650	658	655	651	61
15°	624	659	720	664	631	175
25°	546	587	664	590	552	249
35°	394	420	443	422	399	244
45°	225	228	174	229	229	177
55°	154	142	41	143	159	138
65°	93	82	7	83	96	92
75°	32	28	2	29	33	36
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°	645.4	645.4	645.4	645.4	645.4	645.4	645.4	645.4	645.4	645.4	645.4
2.5°	641.4	637.3	648.8	642.1	643.0	651.2	644.6	642.1	650.4	641.4	645.4
5°	646.3	643.0	654.5	648.8	649.6	657.8	652.1	649.6	658.7	650.4	654.5
7.5°	645.4	643.0	653.7	648.8	649.6	659.5	653.7	652.9	663.6	656.2	662.0
10°	638.9	635.6	647.1	643.0	644.6	655.4	650.4	650.4	662.8	657.8	666.1
12.5°	632.3	629.0	640.6	637.3	638.9	650.4	647.1	648.8	662.8	659.5	670.1
15°	624.1	620.8	633.1	629.8	631.5	643.8	642.1	643.8	659.5	658.7	671.0
17.5°	610.1	608.5	619.1	617.4	619.1	631.5	630.7	633.1	650.4	650.4	666.1
20°	591.9	589.4	601.0	599.4	600.2	612.6	612.6	615.1	633.1	634.8	650.4
22.5°	570.5	568.9	580.5	578.0	579.6	591.1	591.1	593.6	610.9	613.4	629.8
25°	545.8	544.2	554.9	554.1	554.9	566.4	565.6	568.9	585.4	587.1	602.7
27.5°	516.2	513.7	524.5	524.5	525.3	536.0	536.0	537.6	552.5	554.1	568.9
30°	480.0	477.5	487.4	488.2	488.2	498.9	498.9	499.8	513.7	514.5	527.8
32.5°	438.8	438.8	446.2	447.1	447.1	457.0	457.8	457.8	470.1	470.1	480.8
35°	393.5	394.4	400.2	401.0	401.8	410.8	410.8	410.0	420.7	419.9	429.0
37.5°	345.0	345.0	350.8	351.6	351.6	359.8	359.8	358.9	368.0	365.5	372.2
40°	298.1	298.1	302.9	304.6	303.8	310.4	310.4	309.5	316.2	312.9	316.2
42.5°	256.9	258.5	261.8	262.6	261.8	267.6	266.8	265.9	270.9	265.9	266.8
45°	224.7	226.4	228.9	229.7	228.9	233.0	232.2	230.5	233.0	228.0	225.6
47.5°	200.9	201.7	205.8	205.0	204.2	207.5	207.5	204.2	205.0	198.4	193.5
50°	182.8	183.6	186.9	186.9	185.3	188.6	186.9	183.6	182.8	175.3	168.0
52.5°	168.0	168.8	172.0	172.0	170.4	172.9	171.2	166.3	165.5	158.1	149.0
55°	153.9	154.8	158.1	158.1	156.4	158.1	155.6	151.5	149.8	141.6	131.7
57.5°	141.6	140.8	143.3	143.3	141.6	142.5	140.8	136.7	133.4	125.9	116.1
60°	125.9	125.1	126.8	126.8	125.1	125.9	124.3	119.3	117.8	110.3	100.4
62.5°	108.7	108.7	110.3	110.3	108.7	108.7	107.9	102.9	101.3	94.6	86.5
65°	93.0	93.0	94.6	94.6	93.0	93.8	92.2	89.0	87.3	81.5	74.1
67.5°	77.4	77.4	78.2	78.2	77.4	77.4	76.6	74.1	71.6	67.5	61.0
70°	61.0	61.0	61.8	61.8	61.0	61.0	61.0	58.5	57.7	53.5	48.6
72.5°	45.3	45.3	46.1	46.1	46.1	46.9	46.1	44.4	42.8	40.3	36.3
75°	32.1	32.1	32.1	33.0	32.1	32.1	33.0	31.3	30.5	28.0	25.5
77.5°	21.4	21.4	21.4	21.4	21.4	22.2	21.4	21.4	20.6	18.9	17.3
80°	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	12.4	12.4	10.7
82.5°	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	6.6	5.8
85°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	2.5
87.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	645.4	645.4	645.4	645.4	645.4	645.4	645.4	645.4	645.4	645.4	645.4
2.5°	644.6	645.4	645.4	647.9	650.4	643.8	647.1	645.4	643.8	650.4	646.3
5°	655.4	656.2	656.2	659.5	662.8	655.4	658.7	657.8	656.2	662.0	657.8
7.5°	663.6	666.1	667.7	671.8	675.9	669.3	673.4	671.8	671.0	676.7	671.0
10°	669.3	674.3	676.7	683.4	689.1	682.5	688.3	686.7	685.8	690.8	684.2
12.5°	675.9	682.5	689.1	696.5	704.7	699.0	706.4	703.9	703.9	708.1	699.8
15°	680.1	688.3	697.3	708.1	718.0	713.8	722.0	719.6	719.6	722.8	713.8
17.5°	675.9	686.7	697.3	709.7	721.2	718.8	727.8	725.3	724.5	727.8	717.1
20°	662.0	674.3	686.7	699.0	712.2	710.5	720.4	716.3	717.1	718.8	708.1
22.5°	639.8	652.9	665.3	678.4	690.8	690.0	699.0	696.5	695.7	698.1	686.7
25°	613.4	624.9	636.4	647.9	660.3	658.7	667.7	663.6	664.4	665.3	655.4
27.5°	578.0	588.7	597.7	607.6	619.1	616.6	625.7	624.1	621.6	622.4	614.2
30°	534.4	543.4	550.0	558.2	567.2	564.8	573.0	571.4	569.7	569.7	564.8
32.5°	484.9	491.5	495.6	501.4	508.0	505.5	512.1	510.5	508.8	508.8	505.5
35°	429.8	433.8	433.8	437.2	442.1	438.0	443.8	442.9	440.5	441.3	440.5
37.5°	369.7	371.3	368.0	368.0	371.3	365.5	370.5	370.5	368.0	368.9	368.9
40°	311.2	310.4	303.8	300.6	300.6	294.8	298.9	298.1	296.4	297.2	298.9
42.5°	259.3	254.4	245.4	238.8	237.1	230.5	233.0	232.2	230.5	232.2	234.6
45°	215.7	206.6	194.3	185.3	181.1	174.5	175.3	174.5	173.7	175.3	179.5
47.5°	181.1	168.8	153.1	141.6	135.9	128.4	128.4	127.6	127.6	131.7	134.2
50°	153.9	139.2	121.0	107.9	99.6	93.0	91.4	90.6	91.4	94.6	99.6
52.5°	133.4	115.3	95.5	81.5	72.4	65.1	63.4	62.6	63.4	66.6	71.6
55°	115.3	96.3	75.7	60.1	50.2	43.6	41.1	41.1	41.1	45.3	50.2
57.5°	98.8	79.9	59.3	43.6	34.6	28.0	25.5	24.7	26.3	28.8	33.8
60°	84.8	66.6	46.9	33.0	23.9	18.1	15.6	15.6	15.6	18.9	23.9
62.5°	72.4	56.0	37.9	24.7	17.3	12.4	9.9	9.9	10.7	12.4	17.3
65°	61.8	47.7	32.1	21.4	14.0	9.9	8.3	7.4	8.3	9.9	14.0
67.5°	51.0	39.5	27.2	18.1	12.4	8.3	7.4	6.6	6.6	9.1	11.6
70°	40.3	31.3	22.2	14.8	9.9	6.6	5.8	5.0	5.8	7.4	9.9
72.5°	30.5	23.9	16.4	11.6	7.4	5.8	4.1	4.1	4.1	5.8	7.4
75°	21.4	17.3	12.4	8.3	5.0	3.3	3.3	2.5	3.3	4.1	5.0
77.5°	14.0	11.6	8.3	5.0	3.3	2.5	1.7	1.7	1.7	2.5	3.3
80°	9.1	7.4	5.0	3.3	2.5	1.7	0.8	0.8	0.8	1.7	1.7
82.5°	5.0	4.1	2.5	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8
85°	2.5	1.7	1.7	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8
87.5°	0.8	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°	645.4	645.4	645.4	645.4	645.4	645.4	645.4	645.4	645.4	645.4	645.4
2.5°	647.1	644.6	647.9	650.4	649.6	647.1	651.2	644.6	647.1	644.6	640.6
5°	658.7	656.2	658.7	660.3	659.5	655.4	658.7	652.9	654.5	651.2	647.1
7.5°	671.0	667.7	668.5	669.3	666.9	661.1	663.6	656.2	657.0	652.9	647.9
10°	682.5	677.6	676.7	675.1	670.1	662.8	663.6	654.5	653.7	647.9	642.1
12.5°	697.3	689.1	685.8	682.5	675.1	665.3	663.6	652.9	651.2	644.6	638.1
15°	708.1	699.0	693.3	686.7	676.7	664.4	661.1	648.8	645.4	638.1	631.5
17.5°	710.5	699.0	690.8	682.5	671.0	656.2	651.2	638.1	634.0	625.7	619.1
20°	699.8	687.5	678.4	667.7	656.2	638.9	634.0	619.9	615.1	607.6	601.0
22.5°	679.2	665.3	656.2	645.4	634.0	617.4	611.8	598.5	593.6	586.2	579.6
25°	649.6	636.4	627.4	617.4	606.8	590.3	585.4	573.0	568.9	561.5	554.9
27.5°	608.5	596.1	591.1	581.3	571.4	557.4	552.5	541.7	537.6	532.7	525.3
30°	559.1	548.3	545.8	536.8	529.4	517.0	512.9	503.9	499.8	495.6	489.0
32.5°	502.2	494.0	494.0	486.5	481.7	471.8	468.5	461.0	457.8	454.5	448.7
35°	438.0	432.2	435.5	430.6	428.2	421.5	419.1	413.3	410.8	408.3	402.6
37.5°	369.7	365.5	372.2	373.0	373.0	367.2	365.5	362.2	360.6	358.1	353.2
40°	302.1	301.3	311.2	312.9	317.8	314.5	315.3	312.9	311.2	309.5	306.2
42.5°	239.6	242.9	255.2	262.6	267.6	267.6	270.1	269.2	268.4	266.8	264.3
45°	186.1	192.7	207.5	216.6	226.4	228.9	233.0	233.0	233.8	233.0	230.5
47.5°	142.5	152.3	169.6	183.6	194.3	199.2	205.0	206.6	207.5	207.5	205.8
50°	107.9	120.2	140.0	155.6	170.4	177.0	183.6	186.1	189.4	188.6	186.9
52.5°	81.5	95.5	117.0	135.9	151.5	158.9	166.3	169.6	172.9	172.9	172.0
55°	60.1	74.9	98.0	117.8	134.2	143.3	150.6	153.9	158.1	158.9	158.1
57.5°	43.6	58.5	80.7	102.1	117.8	127.6	135.0	138.3	142.5	143.3	143.3
60°	32.1	46.9	68.3	88.1	102.9	112.8	118.5	122.6	125.9	127.6	127.6
62.5°	24.7	37.9	57.7	75.7	89.0	97.1	102.9	106.2	109.5	110.3	111.2
65°	20.6	32.1	48.6	64.3	75.7	83.2	88.1	91.4	93.8	94.6	94.6
67.5°	17.3	27.2	40.3	52.7	62.6	68.3	72.4	74.9	77.4	78.2	78.2
70°	14.0	21.4	32.1	42.0	49.4	54.3	57.7	60.1	61.8	61.8	61.8
72.5°	10.7	16.4	23.9	31.3	37.1	41.1	43.6	44.4	46.1	46.1	46.1
75°	7.4	11.6	17.3	22.2	25.5	28.8	30.5	31.3	32.1	33.0	32.1
77.5°	5.0	7.4	10.7	14.0	17.3	18.9	19.7	20.6	21.4	21.4	21.4
80°	3.3	5.0	6.6	9.1	10.7	11.6	12.4	12.4	13.1	13.1	13.1
82.5°	1.7	2.5	4.1	5.0	5.8	6.6	6.6	6.6	7.4	7.4	6.6
85°	0.8	0.8	1.7	2.5	2.5	3.3	3.3	3.3	3.3	3.3	3.3
87.5°	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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: P136487

CATALOG NUMBER: LD6A10D010TE ERW6A10940 6LW121LI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	645.4	645.4	645.4	645.4
2.5°	642.1	643.8	637.3	645.4
5°	647.9	649.6	643.0	651.2
7.5°	648.8	649.6	643.0	651.2
10°	643.0	643.0	636.4	644.6
12.5°	638.1	637.3	629.8	638.1
15°	630.7	629.8	622.4	630.7
17.5°	618.3	617.4	610.1	617.4
20°	599.4	598.5	591.9	599.4
22.5°	578.8	577.1	570.5	577.1
25°	554.9	553.3	546.7	552.5
27.5°	524.5	522.8	516.2	522.0
30°	488.2	485.7	480.8	484.9
32.5°	447.1	445.4	439.6	444.6
35°	401.8	399.3	395.2	399.3
37.5°	352.4	350.8	346.6	349.1
40°	304.6	303.8	300.6	302.1
42.5°	263.5	261.8	259.3	261.0
45°	230.5	229.7	227.2	228.9
47.5°	205.8	205.0	202.5	204.2
50°	187.7	186.9	185.3	186.1
52.5°	172.9	172.0	170.4	172.9
55°	159.7	158.9	156.4	158.9
57.5°	144.9	144.0	141.6	144.9
60°	128.4	128.4	125.9	129.3
62.5°	112.0	112.0	110.3	112.8
65°	96.3	95.5	94.6	96.3
67.5°	79.0	78.2	78.2	79.9
70°	62.6	61.8	61.8	63.4
72.5°	46.9	46.1	46.1	46.9
75°	33.0	32.1	32.1	33.0
77.5°	21.4	21.4	21.4	21.4
80°	13.1	13.1	13.1	13.1
82.5°	7.4	7.4	6.6	7.4
85°	3.3	3.3	3.3	3.3
87.5°	0.8	0.8	0.8	0.8
90°	0.0	0.0	0.0	0.0



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















(END OF REPORT)