

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: P136517

Luminaire Tested: **LD6A15D010TE ERW6A15930 6LW121LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136517
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: LD6A15D010TE ERW6A15930 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: 1561.1 lumens
Efficiency: N/A
Efficacy: 69.1 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

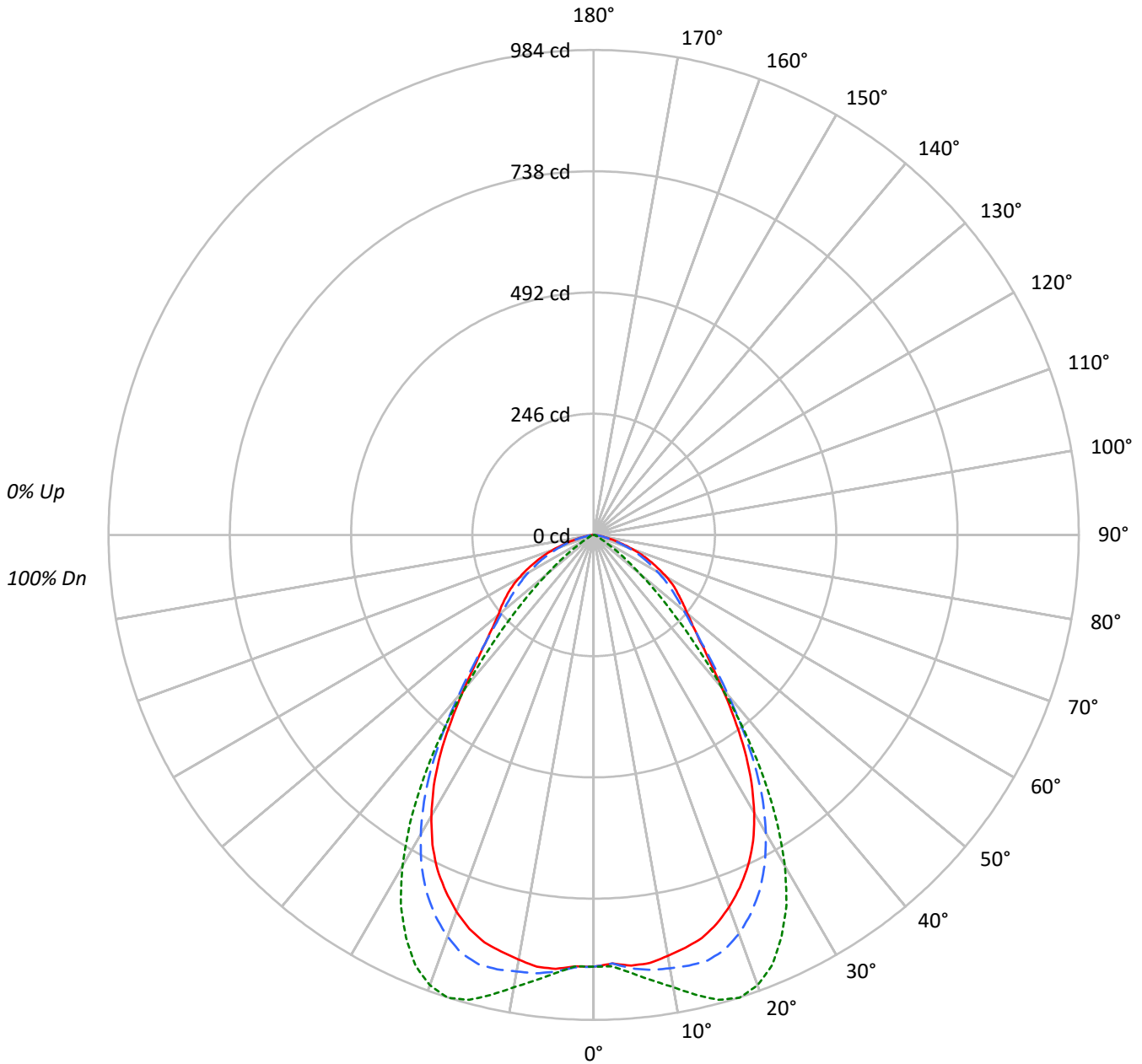
Input Watts (W): 22.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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			100
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89			89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79			79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70			70
4	90	80	73	67	88	79	72	67	77	71	66	74	69	65	72	68	65	63			63
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56			56
6	78	67	60	54	77	66	59	54	65	58	54	63	57	53	62	57	53	51			51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46			46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42			42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	40	39			39
10	61	49	42	38	60	49	42	38	48	42	38	47	42	37	46	41	37	36			36

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	57157	57157	57157
5°	57448	58469	57886
10°	57443	61736	57966
15°	57208	65962	57809
20°	55778	67491	56472
25°	53334	64830	53974
30°	49072	58421	49577
35°	42538	47874	43159
40°	34449	34449	34926
45°	28141	21857	28666
50°	25171	12484	25628
55°	23772	6358	24534
60°	22299	2779	22899
65°	19497	1544	20176
70°	15775	1278	16405
75°	10990	832	11268
80°	6725	413	6725
85°	3368	823	3368



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.2	5.5
10°-20°	255.4	16.4
20°-30°	371.5	23.8
30°-40°	353.0	22.6
40°-50°	228.7	14.7
50°-60°	143.5	9.2
60°-70°	85.8	5.5
70°-80°	33.5	2.1
80°-90°	4.6	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°	712.0	45.6
0°-40°	1065.1	68.2
0°-60°	1437.3	92.1
0°-90°	1561.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1561.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	876	876	876	876	876	
5°	877	883	893	889	884	83
15°	847	894	977	902	856	238
25°	741	797	901	801	750	339
35°	534	570	601	572	542	331
45°	305	310	237	311	311	241
55°	209	192	56	194	216	187
65°	126	111	10	113	131	125
75°	44	38	3	39	45	48
85°	4	4	1	4	4	7
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°	876.1	876.1	876.1	876.1	876.1	876.1	876.1	876.1	876.1	876.1	876.1
2.5°	870.4	864.8	880.5	871.5	872.6	883.9	875.0	871.5	882.7	870.4	876.1
5°	877.2	872.6	888.3	880.5	881.6	892.8	885.0	881.6	893.9	882.7	888.3
7.5°	876.1	872.6	887.2	880.5	881.6	895.0	887.2	886.1	900.6	890.5	898.3
10°	867.1	862.6	878.3	872.6	875.0	889.4	882.7	882.7	899.4	892.8	904.0
12.5°	858.2	853.7	869.3	864.8	867.1	882.7	878.3	880.5	899.4	895.0	909.6
15°	847.0	842.5	859.3	854.8	857.0	873.8	871.5	873.8	895.0	893.9	910.7
17.5°	828.0	825.8	840.2	838.0	840.2	857.0	855.9	859.3	882.7	882.7	904.0
20°	803.4	800.1	815.7	813.4	814.5	831.3	831.3	834.7	859.3	861.5	882.7
22.5°	774.4	772.1	787.7	784.4	786.6	802.3	802.3	805.6	829.1	832.5	854.8
25°	740.9	738.5	753.1	752.0	753.1	768.8	767.7	772.1	794.5	796.7	817.9
27.5°	700.6	697.3	711.7	711.7	712.9	727.4	727.4	729.6	749.8	752.0	772.1
30°	651.4	648.1	661.5	662.6	662.6	677.1	677.1	678.2	697.3	698.4	716.3
32.5°	595.5	595.5	605.6	606.8	606.8	620.1	621.3	621.3	638.1	638.1	652.5
35°	534.1	535.2	543.0	544.1	545.3	557.6	557.6	556.5	571.0	569.8	582.2
37.5°	468.1	468.1	476.0	477.1	477.1	488.3	488.3	487.2	499.5	496.1	505.1
40°	404.5	404.5	411.2	413.4	412.3	421.3	421.3	420.2	429.1	424.6	429.1
42.5°	348.6	350.9	355.3	356.4	355.3	363.2	362.0	360.9	367.7	360.9	362.0
45°	305.0	307.2	310.7	311.8	310.7	316.2	315.1	312.9	316.2	309.5	306.1
47.5°	272.6	273.7	279.3	278.2	277.1	281.5	281.5	277.1	278.2	269.3	262.6
50°	248.0	249.1	253.6	253.6	251.4	255.9	253.6	249.1	248.0	238.0	227.9
52.5°	227.9	229.1	233.6	233.6	231.3	234.7	232.5	225.7	224.6	214.5	202.3
55°	209.0	210.1	214.5	214.5	212.3	214.5	211.2	205.6	203.4	192.2	178.8
57.5°	192.2	191.1	194.4	194.4	192.2	193.3	191.1	185.5	181.0	170.9	157.6
60°	170.9	169.8	172.0	172.0	169.8	170.9	168.7	162.0	159.8	149.8	136.3
62.5°	147.5	147.5	149.8	149.8	147.5	147.5	146.3	139.7	137.4	128.5	117.3
65°	126.3	126.3	128.5	128.5	126.3	127.4	125.2	120.7	118.4	110.6	100.6
67.5°	105.0	105.0	106.2	106.2	105.0	105.0	103.9	100.6	97.3	91.6	82.7
70°	82.7	82.7	83.8	83.8	82.7	82.7	82.7	79.3	78.2	72.7	65.9
72.5°	61.4	61.4	62.5	62.5	62.5	63.7	62.5	60.3	58.1	54.7	49.2
75°	43.6	43.6	43.6	44.7	43.6	43.6	44.7	42.5	41.4	37.9	34.6
77.5°	29.0	29.0	29.0	29.0	29.0	30.2	29.0	29.0	27.9	25.7	23.5
80°	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	16.8	16.8	14.6
82.5°	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	8.9	7.8
85°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	3.3
87.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
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°	876.1	876.1	876.1	876.1	876.1	876.1	876.1	876.1	876.1	876.1	876.1
2.5°	875.0	876.1	876.1	879.4	882.7	873.8	878.3	876.1	873.8	882.7	877.2
5°	889.4	890.5	890.5	895.0	899.4	889.4	893.9	892.8	890.5	898.3	892.8
7.5°	900.6	904.0	906.2	911.8	917.4	908.5	914.0	911.8	910.7	918.5	910.7
10°	908.5	915.1	918.5	927.4	935.3	926.3	934.2	931.9	930.8	937.5	928.6
12.5°	917.4	926.3	935.3	945.3	956.5	948.6	958.7	955.4	955.4	961.0	949.7
15°	922.9	934.2	946.4	961.0	974.3	968.8	979.9	976.6	976.6	981.0	968.8
17.5°	917.4	931.9	946.4	963.2	978.8	975.4	987.8	984.5	983.3	987.8	973.2
20°	898.3	915.1	931.9	948.6	966.5	964.3	977.7	972.1	973.2	975.4	961.0
22.5°	868.2	886.1	902.9	920.7	937.5	936.4	948.6	945.3	944.2	947.5	931.9
25°	832.5	848.1	863.7	879.4	896.1	893.9	906.2	900.6	901.8	902.9	889.4
27.5°	784.4	799.0	811.2	824.7	840.2	836.9	849.3	847.0	843.6	844.7	833.6
30°	725.2	737.4	746.4	757.6	769.9	766.5	777.7	775.5	773.3	773.3	766.5
32.5°	658.1	667.1	672.7	680.5	689.5	686.1	695.0	692.8	690.6	690.6	686.1
35°	583.3	588.9	588.9	593.3	600.0	594.4	602.2	601.1	597.8	598.9	597.8
37.5°	501.7	504.0	499.5	499.5	504.0	496.1	502.9	502.9	499.5	500.6	500.6
40°	422.4	421.3	412.3	407.8	407.8	400.0	405.6	404.5	402.3	403.4	405.6
42.5°	352.0	345.3	332.9	324.0	321.8	312.9	316.2	315.1	312.9	315.1	318.5
45°	292.8	280.4	263.7	251.4	245.8	236.9	238.0	236.9	235.8	238.0	243.6
47.5°	245.8	229.1	207.9	192.2	184.4	174.3	174.3	173.1	173.1	178.8	182.2
50°	209.0	188.8	164.2	146.3	135.2	126.3	124.1	123.0	124.1	128.5	135.2
52.5°	181.0	156.5	129.6	110.6	98.4	88.2	86.0	84.9	86.0	90.5	97.3
55°	156.5	130.7	102.8	81.6	68.2	59.2	55.9	55.9	55.9	61.4	68.2
57.5°	134.1	108.4	80.5	59.2	47.0	37.9	34.6	33.5	35.7	39.1	45.8
60°	115.1	90.5	63.7	44.7	32.4	24.6	21.3	21.3	21.3	25.7	32.4
62.5°	98.4	76.0	51.4	33.5	23.5	16.8	13.4	13.4	14.6	16.8	23.5
65°	83.8	64.8	43.6	29.0	19.0	13.4	11.1	10.0	11.1	13.4	19.0
67.5°	69.3	53.6	36.8	24.6	16.8	11.1	10.0	8.9	8.9	12.2	15.7
70°	54.7	42.5	30.2	20.1	13.4	8.9	7.8	6.7	7.8	10.0	13.4
72.5°	41.4	32.4	22.4	15.7	10.0	7.8	5.6	5.6	5.6	7.8	10.0
75°	29.0	23.5	16.8	11.1	6.7	4.5	4.5	3.3	4.5	5.6	6.7
77.5°	19.0	15.7	11.1	6.7	4.5	3.3	2.2	2.2	2.2	3.3	4.5
80°	12.2	10.0	6.7	4.5	3.3	2.2	1.1	1.1	1.1	2.2	2.2
82.5°	6.7	5.6	3.3	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1
85°	3.3	2.2	2.2	1.1	1.1	1.1	0.0	1.1	1.1	1.1	1.1
87.5°	1.1	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°	876.1	876.1	876.1	876.1	876.1	876.1	876.1	876.1	876.1	876.1	876.1
2.5°	878.3	875.0	879.4	882.7	881.6	878.3	883.9	875.0	878.3	875.0	869.3
5°	893.9	890.5	893.9	896.1	895.0	889.4	893.9	886.1	888.3	883.9	878.3
7.5°	910.7	906.2	907.3	908.5	905.1	897.2	900.6	890.5	891.7	886.1	879.4
10°	926.3	919.6	918.5	916.2	909.6	899.4	900.6	888.3	887.2	879.4	871.5
12.5°	946.4	935.3	930.8	926.3	916.2	902.9	900.6	886.1	883.9	875.0	865.9
15°	961.0	948.6	940.8	931.9	918.5	901.8	897.2	880.5	876.1	865.9	857.0
17.5°	964.3	948.6	937.5	926.3	910.7	890.5	883.9	865.9	860.4	849.3	840.2
20°	949.7	933.0	920.7	906.2	890.5	867.1	860.4	841.4	834.7	824.7	815.7
22.5°	921.8	902.9	890.5	876.1	860.4	838.0	830.2	812.3	805.6	795.6	786.6
25°	881.6	863.7	851.5	838.0	823.5	801.2	794.5	777.7	772.1	762.0	753.1
27.5°	825.8	809.0	802.3	788.8	775.5	756.5	749.8	735.2	729.6	723.0	712.9
30°	758.7	744.2	740.9	728.5	718.5	701.7	696.1	683.8	678.2	672.7	663.8
32.5°	681.6	670.4	670.4	660.4	653.6	640.3	635.8	625.7	621.3	616.8	609.0
35°	594.4	586.6	591.1	584.4	581.1	572.1	568.7	560.9	557.6	554.3	546.4
37.5°	501.7	496.1	505.1	506.2	506.2	498.4	496.1	491.6	489.4	486.1	479.4
40°	410.1	408.9	422.4	424.6	431.3	426.9	428.0	424.6	422.4	420.2	415.6
42.5°	325.1	329.6	346.4	356.4	363.2	363.2	366.5	365.4	364.3	362.0	358.6
45°	252.5	261.5	281.5	293.9	307.2	310.7	316.2	316.2	317.4	316.2	312.9
47.5°	193.3	206.7	230.2	249.1	263.7	270.4	278.2	280.4	281.5	281.5	279.3
50°	146.3	163.1	189.9	211.2	231.3	240.2	249.1	252.5	257.0	255.9	253.6
52.5°	110.6	129.6	158.7	184.4	205.6	215.7	225.7	230.2	234.7	234.7	233.6
55°	81.6	101.7	133.0	159.8	182.2	194.4	204.5	209.0	214.5	215.7	214.5
57.5°	59.2	79.3	109.5	138.5	159.8	173.1	183.3	187.7	193.3	194.4	194.4
60°	43.6	63.7	92.7	119.5	139.7	153.1	160.9	166.5	170.9	173.1	173.1
62.5°	33.5	51.4	78.2	102.8	120.7	131.9	139.7	144.1	148.6	149.8	150.9
65°	27.9	43.6	65.9	87.1	102.8	112.8	119.5	124.1	127.4	128.5	128.5
67.5°	23.5	36.8	54.7	71.5	84.9	92.7	98.4	101.7	105.0	106.2	106.2
70°	19.0	29.0	43.6	57.0	67.0	73.8	78.2	81.6	83.8	83.8	83.8
72.5°	14.6	22.4	32.4	42.5	50.3	55.9	59.2	60.3	62.5	62.5	62.5
75°	10.0	15.7	23.5	30.2	34.6	39.1	41.4	42.5	43.6	44.7	43.6
77.5°	6.7	10.0	14.6	19.0	23.5	25.7	26.8	27.9	29.0	29.0	29.0
80°	4.5	6.7	8.9	12.2	14.6	15.7	16.8	16.8	17.9	17.9	17.9
82.5°	2.2	3.3	5.6	6.7	7.8	8.9	8.9	8.9	10.0	10.0	8.9
85°	1.1	1.1	2.2	3.3	3.3	4.5	4.5	4.5	4.5	4.5	4.5
87.5°	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
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: P136517

CATALOG NUMBER: LD6A15D010TE ERW6A15930 6LW121LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	876.1	876.1	876.1	876.1
2.5°	871.5	873.8	864.8	876.1
5°	879.4	881.6	872.6	883.9
7.5°	880.5	881.6	872.6	883.9
10°	872.6	872.6	863.7	875.0
12.5°	865.9	864.8	854.8	865.9
15°	855.9	854.8	844.7	855.9
17.5°	839.1	838.0	828.0	838.0
20°	813.4	812.3	803.4	813.4
22.5°	785.5	783.3	774.4	783.3
25°	753.1	750.9	742.0	749.8
27.5°	711.7	709.5	700.6	708.4
30°	662.6	659.3	652.5	658.1
32.5°	606.8	604.5	596.7	603.3
35°	545.3	541.9	536.3	541.9
37.5°	478.3	476.0	470.4	473.8
40°	413.4	412.3	407.8	410.1
42.5°	357.5	355.3	352.0	354.2
45°	312.9	311.8	308.4	310.7
47.5°	279.3	278.2	274.9	277.1
50°	254.7	253.6	251.4	252.5
52.5°	234.7	233.6	231.3	234.7
55°	216.8	215.7	212.3	215.7
57.5°	196.6	195.5	192.2	196.6
60°	174.3	174.3	170.9	175.5
62.5°	152.0	152.0	149.8	153.1
65°	130.7	129.6	128.5	130.7
67.5°	107.3	106.2	106.2	108.4
70°	84.9	83.8	83.8	86.0
72.5°	63.7	62.5	62.5	63.7
75°	44.7	43.6	43.6	44.7
77.5°	29.0	29.0	29.0	29.0
80°	17.9	17.9	17.9	17.9
82.5°	10.0	10.0	8.9	10.0
85°	4.5	4.5	4.5	4.5
87.5°	1.1	1.1	1.1	1.1
90°	0.0	0.0	0.0	0.0



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













(END OF REPORT)