

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: P136392

Luminaire Tested: **LD6A15D010TE ERW6A15827 6LW111H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136392
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23375)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6A15D010TE ERW6A15827 6LW111H
Description: PORTFOLIO 6 INCH 60 DEGREE CUTOFF RECESSED SINGLE WALL WASH LUMINAIRE
SEMI-SPECULAR CLEAR TRIM AND SPECULAR CLEAR KICKER
Light Source: (1) HIGH LUMEN LED 2700K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1432.0 lumens
Efficiency: N/A
Efficacy: 63.4 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.17 / 1.12
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

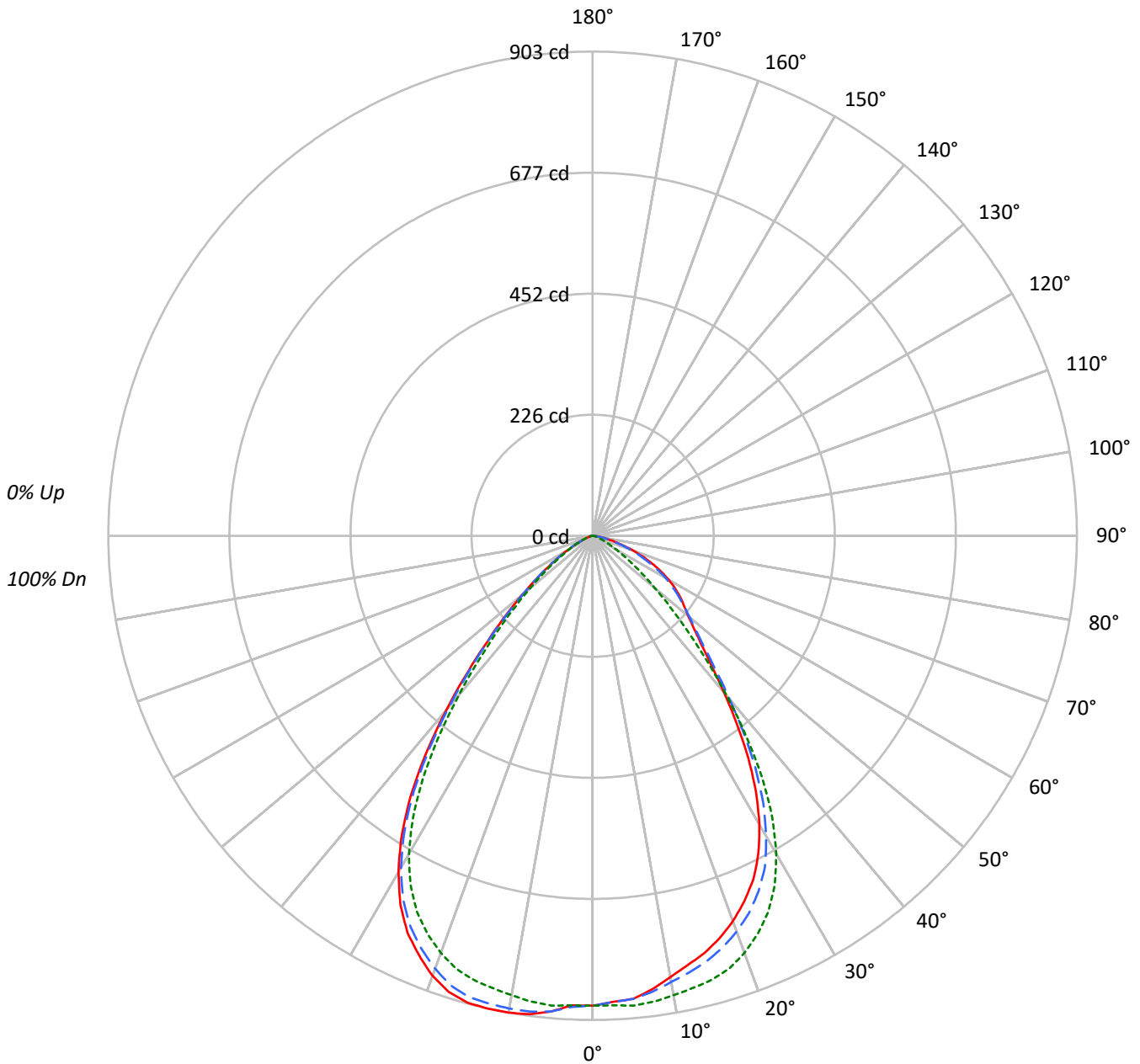
Input Watts (W): 22.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90																			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80																			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73	72																			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64																			
5	85	74	67	62	83	73	67	61	71	65	61	70	64	60	68	63	60	58																			
6	79	68	61	56	78	68	61	55	66	60	55	64	59	55	63	58	54	52																			
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	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	65	54	47	42	53	46	42	52	46	42	51	46	42	40																			
10	62	51	44	39	61	50	43	39	49	43	39	48	43	39	48	42	39	37																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	57177	57177	57177
5°	56780	57598	58319
10°	55349	57642	59828
15°	54419	57917	60889
20°	53105	57465	60624
25°	50987	55738	58790
30°	46850	51588	54541
35°	40276	43908	47030
40°	32371	33036	36119
45°	26369	22891	25354
50°	23588	15306	17376
55°	22692	10009	11431
60°	21308	6354	7176
65°	18911	3875	4122
70°	15279	2403	2403
75°	10688	1588	1588
80°	7063	1165	1165
85°	3518	1198	1198



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.4	5.8
10°-20°	240.6	16.8
20°-30°	350.3	24.5
30°-40°	339.8	23.7
40°-50°	214.8	15.0
50°-60°	119.6	8.4
60°-70°	59.3	4.1
70°-80°	20.9	1.5
80°-90°	3.3	0.2
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°	674.4	47.1
0°-40°	1014.2	70.8
0°-60°	1348.6	94.2
0°-90°	1432.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1432.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	876	876	876	876	876	
5°	867	867	880	890	890	82
15°	806	821	858	890	902	227
25°	708	732	774	804	817	323
35°	506	529	551	581	590	313
45°	286	294	248	272	275	226
55°	200	195	88	100	100	178
65°	122	113	25	27	27	120
75°	42	39	6	6	6	47
85°	5	5	2	2	2	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°	876.4	876.4	876.4	876.4	876.4	876.4	876.4	876.4	876.4	876.4	876.4
2.5°	870.1	862.2	865.4	863.8	865.4	863.8	868.5	863.8	867.0	870.1	863.8
5°	867.0	859.1	860.7	860.7	860.7	860.7	865.4	860.7	863.8	867.0	862.2
7.5°	852.8	846.5	848.1	848.1	848.1	848.1	852.8	849.7	852.8	857.5	852.8
10°	835.5	829.3	832.4	832.4	832.4	832.4	838.7	835.5	838.7	845.0	840.3
12.5°	819.8	815.1	818.3	818.3	818.3	819.8	824.5	823.0	826.1	834.0	829.3
15°	805.7	801.0	804.1	804.1	804.1	805.7	810.4	812.0	815.1	821.4	818.3
17.5°	786.9	782.1	786.9	786.9	785.3	788.4	794.7	794.7	797.8	805.7	804.1
20°	764.9	760.2	764.9	764.9	763.3	766.4	772.7	774.3	777.4	785.3	783.7
22.5°	738.2	736.6	738.2	741.3	739.7	741.3	747.6	749.2	752.3	761.7	760.2
25°	708.3	706.8	709.9	711.5	709.9	711.5	717.7	719.3	722.5	731.9	731.9
27.5°	669.1	667.5	672.2	672.2	672.2	675.3	680.1	683.2	684.8	695.8	694.2
30°	621.9	620.4	623.5	625.1	625.1	625.1	631.4	636.1	637.6	647.1	647.1
32.5°	567.0	567.0	568.5	571.7	570.1	573.3	578.0	581.1	584.3	592.1	592.1
35°	505.7	507.3	508.9	512.0	510.4	512.0	516.7	519.9	521.4	529.3	527.7
37.5°	441.3	442.9	444.5	446.0	446.0	447.6	452.3	453.9	455.5	461.7	458.6
40°	380.1	380.1	381.6	384.8	383.2	386.4	389.5	391.1	391.1	395.8	392.6
42.5°	326.7	328.2	329.8	331.4	331.4	333.0	336.1	337.7	337.7	339.2	334.5
45°	285.8	287.4	287.4	290.6	290.6	292.1	293.7	295.3	293.7	293.7	289.0
47.5°	256.0	257.6	259.1	260.7	260.7	262.3	263.9	263.9	262.3	260.7	254.4
50°	232.4	235.6	235.6	237.2	238.7	240.3	240.3	240.3	237.2	235.6	226.2
52.5°	215.2	216.7	218.3	219.9	219.9	221.4	223.0	221.4	218.3	213.6	204.2
55°	199.5	201.0	202.6	204.2	204.2	204.2	204.2	202.6	199.5	194.8	185.3
57.5°	182.2	183.8	185.3	186.9	186.9	186.9	186.9	185.3	182.2	175.9	164.9
60°	163.3	164.9	166.5	168.1	168.1	168.1	166.5	164.9	161.8	157.1	146.1
62.5°	142.9	144.5	146.1	146.1	146.1	144.5	144.5	142.9	139.8	135.1	124.1
65°	122.5	122.5	124.1	124.1	124.1	124.1	122.5	120.9	117.8	113.1	105.2
67.5°	100.5	102.1	102.1	102.1	102.1	102.1	100.5	100.5	97.4	92.7	86.4
70°	80.1	80.1	81.7	81.7	81.7	81.7	80.1	80.1	77.0	73.8	67.5
72.5°	59.7	59.7	59.7	61.3	61.3	61.3	59.7	59.7	58.1	55.0	50.3
75°	42.4	42.4	42.4	44.0	44.0	44.0	44.0	44.0	42.4	40.8	36.1
77.5°	28.3	29.8	28.3	28.3	28.3	29.8	28.3	28.3	28.3	26.7	23.6
80°	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	17.3	17.3	15.7
82.5°	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	9.4	9.4
85°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
87.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
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°	876.4	876.4	876.4	876.4	876.4	876.4	876.4	876.4	876.4	876.4	876.4
2.5°	868.5	871.7	874.8	871.7	867.0	876.4	874.8	876.4	874.8	871.7	881.1
5°	867.0	870.1	874.8	871.7	868.5	877.9	876.4	879.5	879.5	876.4	885.8
7.5°	857.5	860.7	868.5	865.4	862.2	871.7	873.2	876.4	877.9	874.8	885.8
10°	846.5	849.7	857.5	856.0	854.4	865.4	867.0	870.1	871.7	870.1	881.1
12.5°	835.5	840.3	848.1	846.5	846.5	857.5	859.1	863.8	867.0	865.4	877.9
15°	824.5	830.8	840.3	838.7	838.7	851.2	852.8	857.5	860.7	860.7	873.2
17.5°	810.4	816.7	826.1	824.5	827.7	837.1	840.3	846.5	849.7	848.1	862.2
20°	790.0	797.8	807.3	805.7	807.3	819.8	823.0	827.7	830.8	830.8	843.4
22.5°	766.4	774.3	783.7	782.1	785.3	794.7	797.8	804.1	807.3	805.7	818.3
25°	738.2	746.0	753.9	753.9	755.4	766.4	769.6	774.3	779.0	777.4	788.4
27.5°	700.5	708.3	716.2	714.6	716.2	727.2	730.3	735.0	739.7	738.2	749.2
30°	651.8	659.6	665.9	664.3	665.9	676.9	678.5	684.8	689.5	689.5	698.9
32.5°	595.2	603.1	606.2	603.1	606.2	614.1	617.2	623.5	626.7	628.2	637.6
35°	530.9	535.6	537.1	534.0	534.0	541.8	545.0	551.3	554.4	556.0	563.8
37.5°	460.2	463.3	460.2	455.5	457.0	460.2	464.9	469.6	474.3	475.9	483.7
40°	391.1	389.5	384.8	376.9	375.4	380.1	383.2	387.9	391.1	394.2	398.9
42.5°	329.8	326.7	317.3	307.8	306.3	306.3	307.8	312.5	315.7	317.3	323.5
45°	281.1	274.8	260.7	249.7	243.4	245.0	245.0	248.1	249.7	252.9	257.6
47.5°	243.4	232.4	215.2	201.0	194.8	193.2	193.2	194.8	196.3	199.5	202.6
50°	213.6	199.5	179.0	163.3	155.5	152.3	152.3	150.8	153.9	155.5	158.6
52.5°	190.0	172.8	149.2	131.9	122.5	119.4	117.8	117.8	117.8	119.4	122.5
55°	168.1	149.2	124.1	106.8	95.8	92.7	89.5	88.0	89.5	91.1	92.7
57.5°	149.2	128.8	103.7	84.8	75.4	70.7	67.5	66.0	66.0	67.5	69.1
60°	130.4	109.9	84.8	67.5	58.1	53.4	50.3	48.7	48.7	50.3	50.3
62.5°	109.9	91.1	69.1	53.4	44.0	39.3	36.1	36.1	34.6	34.6	36.1
65°	92.7	75.4	56.5	42.4	33.0	29.8	26.7	25.1	25.1	23.6	25.1
67.5°	75.4	61.3	45.5	33.0	25.1	22.0	18.8	18.8	17.3	17.3	17.3
70°	59.7	48.7	36.1	25.1	20.4	15.7	14.1	12.6	12.6	12.6	12.6
72.5°	44.0	36.1	26.7	18.8	14.1	12.6	11.0	9.4	7.9	7.9	7.9
75°	31.4	25.1	18.8	14.1	11.0	9.4	7.9	6.3	6.3	6.3	6.3
77.5°	22.0	17.3	14.1	9.4	7.9	6.3	4.7	4.7	4.7	4.7	3.1
80°	14.1	11.0	9.4	6.3	4.7	4.7	3.1	3.1	3.1	3.1	3.1
82.5°	7.9	6.3	4.7	4.7	3.1	3.1	1.6	1.6	1.6	1.6	1.6
85°	3.1	3.1	3.1	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
87.5°	1.6	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°	876.4	876.4	876.4	876.4	876.4	876.4	876.4	876.4	876.4	876.4	876.4
2.5°	871.7	877.9	877.9	881.1	876.4	879.5	884.2	882.7	877.9	879.5	881.1
5°	877.9	884.2	885.8	890.5	885.8	890.5	896.8	895.2	890.5	893.7	895.2
7.5°	877.9	885.8	888.9	893.7	890.5	895.2	903.1	901.5	896.8	899.9	903.1
10°	874.8	882.7	887.4	892.1	888.9	895.2	901.5	901.5	898.4	901.5	906.2
12.5°	871.7	879.5	884.2	888.9	885.8	893.7	901.5	899.9	898.4	901.5	906.2
15°	867.0	874.8	879.5	884.2	882.7	890.5	898.4	898.4	895.2	899.9	904.6
17.5°	856.0	863.8	870.1	873.2	871.7	879.5	887.4	887.4	884.2	888.9	893.7
20°	837.1	845.0	851.2	854.4	852.8	859.1	867.0	868.5	865.4	870.1	874.8
22.5°	813.6	819.8	826.1	829.3	827.7	834.0	841.8	843.4	840.3	845.0	848.1
25°	785.3	790.0	796.3	799.4	797.8	804.1	812.0	812.0	810.4	813.6	816.7
27.5°	746.0	752.3	757.0	760.2	760.2	764.9	771.1	772.7	771.1	774.3	779.0
30°	697.3	700.5	706.8	708.3	709.9	714.6	720.9	720.9	719.3	722.5	727.2
32.5°	636.1	640.8	645.5	647.1	648.6	653.4	658.1	659.6	658.1	661.2	665.9
35°	563.8	568.5	573.3	574.8	576.4	581.1	585.8	587.4	585.8	589.0	593.7
37.5°	483.7	486.9	491.6	493.2	496.3	499.4	502.6	505.7	504.2	507.3	510.4
40°	402.1	403.6	408.3	409.9	413.1	416.2	419.3	420.9	420.9	422.5	424.1
42.5°	325.1	328.2	331.4	333.0	336.1	337.7	340.8	342.4	342.4	344.0	345.5
45°	259.1	262.3	265.4	267.0	270.1	271.7	273.3	274.8	273.3	273.3	276.4
47.5°	204.2	207.3	210.5	212.0	213.6	215.2	216.7	216.7	216.7	218.3	218.3
50°	160.2	161.8	164.9	164.9	168.1	168.1	169.6	169.6	169.6	169.6	171.2
52.5°	124.1	125.6	128.8	128.8	130.4	131.9	131.9	131.9	131.9	133.5	131.9
55°	94.2	95.8	97.4	97.4	100.5	100.5	100.5	100.5	100.5	100.5	100.5
57.5°	70.7	72.2	73.8	73.8	73.8	75.4	73.8	75.4	75.4	75.4	75.4
60°	51.8	53.4	53.4	53.4	55.0	55.0	55.0	55.0	55.0	55.0	55.0
62.5°	36.1	36.1	37.7	37.7	37.7	39.3	37.7	37.7	39.3	39.3	37.7
65°	25.1	25.1	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7
67.5°	17.3	17.3	17.3	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8
70°	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6
72.5°	7.9	7.9	7.9	7.9	9.4	9.4	9.4	9.4	9.4	9.4	9.4
75°	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
77.5°	3.1	3.1	4.7	4.7	4.7	3.1	3.1	3.1	4.7	4.7	3.1
80°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
82.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
85°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0.0	1.6	1.6	1.6
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



TEST NUMBER: P136392

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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	876.4	876.4	876.4	876.4
2.5°	881.1	879.5	881.1	876.4
5°	895.2	893.7	896.8	890.5
7.5°	904.6	903.1	906.2	899.9
10°	906.2	906.2	909.4	903.1
12.5°	906.2	906.2	909.4	903.1
15°	906.2	904.6	907.8	901.5
17.5°	895.2	895.2	898.4	892.1
20°	874.8	874.8	877.9	873.2
22.5°	849.7	849.7	851.2	846.5
25°	818.3	816.7	819.8	816.7
27.5°	779.0	777.4	779.0	775.9
30°	725.6	724.0	727.2	724.0
32.5°	665.9	662.8	665.9	662.8
35°	592.1	589.0	592.1	590.5
37.5°	510.4	507.3	510.4	508.9
40°	424.1	422.5	425.6	424.1
42.5°	345.5	342.4	345.5	344.0
45°	276.4	273.3	276.4	274.8
47.5°	218.3	216.7	219.9	218.3
50°	171.2	169.6	171.2	171.2
52.5°	131.9	130.4	131.9	131.9
55°	100.5	98.9	100.5	100.5
57.5°	75.4	73.8	75.4	75.4
60°	55.0	55.0	55.0	55.0
62.5°	39.3	37.7	39.3	39.3
65°	26.7	26.7	26.7	26.7
67.5°	18.8	18.8	18.8	18.8
70°	12.6	12.6	12.6	12.6
72.5°	9.4	9.4	9.4	7.9
75°	6.3	6.3	6.3	6.3
77.5°	4.7	3.1	4.7	4.7
80°	3.1	3.1	3.1	3.1
82.5°	1.6	1.6	1.6	1.6
85°	1.6	1.6	1.6	1.6
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0



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













(END OF REPORT)