

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: P136398

Luminaire Tested: **LD6A15D010TE ERW6A15935 6LW111H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136398
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 ERW6A15935 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 3500K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1416.5 lumens
Efficiency: N/A
Efficacy: 62.7 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

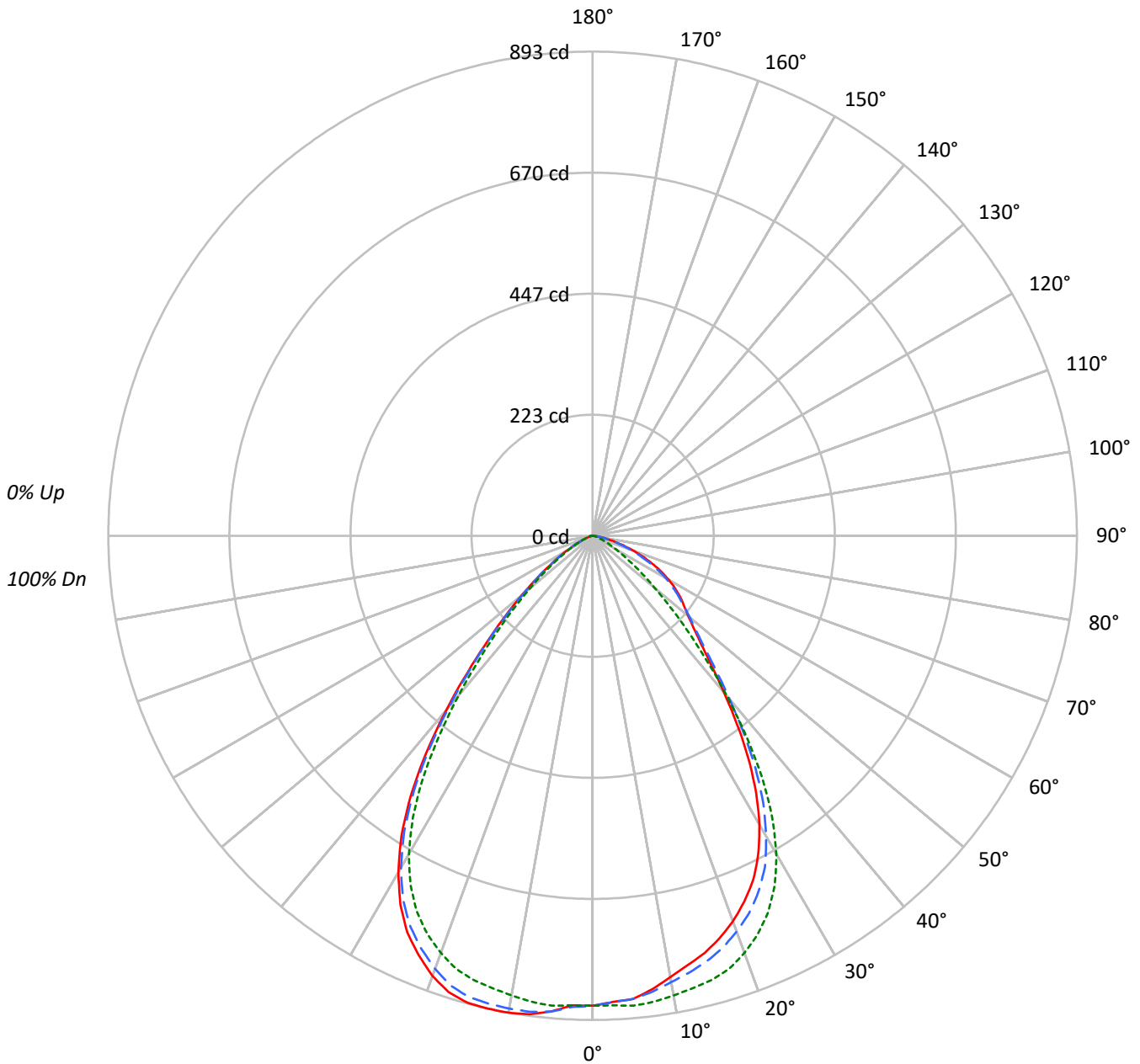
Input Watts (W): 22.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	56551	56551	56551
5°	56158	56976	57683
10°	54753	57019	59179
15°	53824	57289	60227
20°	52529	56847	59972
25°	50440	55133	58150
30°	46345	51031	53954
35°	39846	43430	46520
40°	32022	32678	35718
45°	26083	22642	25087
50°	23334	15133	17193
55°	22442	9896	11317
60°	21073	6289	7085
65°	18710	3844	4075
70°	15107	2365	2365
75°	10562	1563	1563
80°	6988	1165	1165
85°	3518	1198	1198



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.5	5.8
10°-20°	238.0	16.8
20°-30°	346.6	24.5
30°-40°	336.2	23.7
40°-50°	212.5	15.0
50°-60°	118.3	8.4
60°-70°	58.6	4.1
70°-80°	20.6	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°	667.1	47.1
0°-40°	1003.2	70.8
0°-60°	1334.0	94.2
0°-90°	1416.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1416.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	867	867	867	867	867	
5°	858	858	870	881	881	81
15°	797	812	848	881	892	224
25°	701	724	766	796	808	320
35°	500	524	545	575	584	310
45°	283	290	245	269	272	223
55°	197	193	87	100	100	176
65°	121	112	25	26	26	119
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°	866.8	866.8	866.8	866.8	866.8	866.8	866.8	866.8	866.8	866.8	866.8
2.5°	860.7	852.9	856.0	854.5	856.0	854.5	859.1	854.5	857.5	860.7	854.5
5°	857.5	849.8	851.4	851.4	851.4	851.4	856.0	851.4	854.5	857.5	852.9
7.5°	843.5	837.4	838.9	838.9	838.9	838.9	843.5	840.5	843.5	848.2	843.5
10°	826.5	820.2	823.4	823.4	823.4	823.4	829.6	826.5	829.6	835.8	831.2
12.5°	810.9	806.3	809.4	809.4	809.4	810.9	815.6	814.1	817.2	824.9	820.2
15°	796.9	792.3	795.5	795.5	795.5	796.9	801.6	803.2	806.3	812.5	809.4
17.5°	778.3	773.6	778.3	778.3	776.8	779.9	786.1	786.1	789.2	796.9	795.5
20°	756.6	751.9	756.6	756.6	755.0	758.2	764.3	765.9	769.0	776.8	775.2
22.5°	730.2	728.6	730.2	733.3	731.7	733.3	739.5	741.0	744.2	753.5	751.9
25°	700.7	699.1	702.2	703.7	702.2	703.7	710.0	711.6	714.6	724.0	724.0
27.5°	661.8	660.3	665.0	665.0	665.0	668.0	672.7	675.8	677.4	688.3	686.7
30°	615.2	613.7	616.8	618.4	618.4	618.4	624.5	629.2	630.8	640.1	640.1
32.5°	560.8	560.8	562.4	565.5	563.9	567.1	571.8	574.8	577.9	585.7	585.7
35°	500.3	501.8	503.3	506.5	504.9	506.5	511.2	514.2	515.8	523.6	522.0
37.5°	436.6	438.1	439.7	441.3	441.3	442.7	447.4	449.0	450.6	456.7	453.7
40°	376.0	376.0	377.5	380.6	379.1	382.2	385.3	386.8	386.8	391.5	388.4
42.5°	323.2	324.7	326.2	327.8	327.8	329.3	332.5	334.0	334.0	335.6	330.9
45°	282.7	284.3	284.3	287.4	287.4	288.9	290.5	292.0	290.5	290.5	285.9
47.5°	253.3	254.7	256.3	257.9	257.9	259.4	261.0	261.0	259.4	257.9	251.7
50°	229.9	233.0	233.0	234.6	236.1	237.7	237.7	237.7	234.6	233.0	223.7
52.5°	212.8	214.4	216.0	217.5	217.5	219.0	220.6	219.0	216.0	211.3	202.0
55°	197.3	198.8	200.4	202.0	202.0	202.0	202.0	200.4	197.3	192.7	183.3
57.5°	180.2	181.8	183.3	184.8	184.8	184.8	184.8	183.3	180.2	174.0	163.1
60°	161.5	163.1	164.7	166.2	166.2	166.2	164.7	163.1	160.0	155.4	144.5
62.5°	141.4	142.9	144.5	144.5	144.5	142.9	142.9	141.4	138.2	133.6	122.8
65°	121.2	121.2	122.8	122.8	122.8	122.8	121.2	119.6	116.5	111.9	104.1
67.5°	99.5	100.9	100.9	100.9	100.9	100.9	99.5	99.5	96.3	91.6	85.5
70°	79.2	79.2	80.8	80.8	80.8	80.8	79.2	79.2	76.2	73.0	66.8
72.5°	59.0	59.0	59.0	60.6	60.6	60.6	59.0	59.0	57.5	54.3	49.7
75°	41.9	41.9	41.9	43.5	43.5	43.5	43.5	41.9	40.4	38.9	35.7
77.5°	28.0	29.5	28.0	28.0	28.0	29.5	28.0	28.0	28.0	26.4	23.3
80°	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6	17.1	17.1	15.6
82.5°	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	9.3	9.3
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°	866.8	866.8	866.8	866.8	866.8	866.8	866.8	866.8	866.8	866.8	866.8
2.5°	859.1	862.2	865.4	862.2	857.5	866.8	865.4	866.8	865.4	862.2	871.5
5°	857.5	860.7	865.4	862.2	859.1	868.4	866.8	870.0	870.0	866.8	876.2
7.5°	848.2	851.4	859.1	856.0	852.9	862.2	863.8	866.8	868.4	865.4	876.2
10°	837.4	840.5	848.2	846.7	845.1	856.0	857.5	860.7	862.2	860.7	871.5
12.5°	826.5	831.2	838.9	837.4	837.4	848.2	849.8	854.5	857.5	856.0	868.4
15°	815.6	821.8	831.2	829.6	829.6	842.1	843.5	848.2	851.4	851.4	863.8
17.5°	801.6	807.8	817.2	815.6	818.8	828.1	831.2	837.4	840.5	838.9	852.9
20°	781.5	789.2	798.5	796.9	798.5	810.9	814.1	818.8	821.8	821.8	834.2
22.5°	758.2	765.9	775.2	773.6	776.8	786.1	789.2	795.5	798.5	796.9	809.4
25°	730.2	737.9	745.7	745.7	747.3	758.2	761.2	765.9	770.6	769.0	779.9
27.5°	692.9	700.7	708.4	706.9	708.4	719.3	722.4	727.0	731.7	730.2	741.0
30°	644.7	652.5	658.7	657.1	658.7	669.6	671.1	677.4	682.0	682.0	691.3
32.5°	588.8	596.5	599.7	596.5	599.7	607.4	610.5	616.8	619.8	621.4	630.8
35°	525.1	529.8	531.3	528.2	528.2	536.0	539.1	545.3	548.4	549.9	557.8
37.5°	455.2	458.3	455.2	450.6	452.1	455.2	459.9	464.6	469.2	470.7	478.5
40°	386.8	385.3	380.6	372.8	371.3	376.0	379.1	383.7	386.8	390.0	394.6
42.5°	326.2	323.2	313.8	304.5	302.9	302.9	304.5	309.2	312.3	313.8	320.0
45°	278.0	271.9	257.9	247.0	240.8	242.3	242.3	245.4	247.0	250.1	254.7
47.5°	240.8	229.9	212.8	198.8	192.7	191.1	191.1	192.7	194.2	197.3	200.4
50°	211.3	197.3	177.1	161.5	153.8	150.7	150.7	149.1	152.2	153.8	156.9
52.5°	188.0	170.9	147.5	130.5	121.2	118.1	116.5	116.5	116.5	118.1	121.2
55°	166.2	147.5	122.8	105.6	94.8	91.6	88.5	87.0	88.5	90.1	91.6
57.5°	147.5	127.4	102.5	83.9	74.6	69.9	66.8	65.2	65.2	66.8	68.3
60°	128.9	108.8	83.9	66.8	57.5	52.9	49.7	48.2	48.2	49.7	49.7
62.5°	108.8	90.1	68.3	52.9	43.5	38.9	35.7	35.7	34.2	34.2	35.7
65°	91.6	74.6	55.9	41.9	32.6	29.5	26.4	24.9	24.9	23.3	24.9
67.5°	74.6	60.6	45.0	32.6	24.9	21.7	18.6	18.6	17.1	17.1	17.1
70°	59.0	48.2	35.7	24.9	20.2	15.6	14.0	12.4	12.4	12.4	12.4
72.5°	43.5	35.7	26.4	18.6	14.0	12.4	10.9	9.3	7.7	7.7	7.7
75°	31.0	24.9	18.6	14.0	10.9	9.3	7.7	6.2	6.2	6.2	6.2
77.5°	21.7	17.1	14.0	9.3	7.7	6.2	4.7	4.7	4.7	4.7	3.1
80°	14.0	10.9	9.3	6.2	4.7	4.7	3.1	3.1	3.1	3.1	3.1
82.5°	7.7	6.2	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°	866.8	866.8	866.8	866.8	866.8	866.8	866.8	866.8	866.8	866.8	866.8
2.5°	862.2	868.4	868.4	871.5	866.8	870.0	874.7	873.1	868.4	870.0	871.5
5°	868.4	874.7	876.2	880.8	876.2	880.8	887.1	885.5	880.8	884.0	885.5
7.5°	868.4	876.2	879.3	884.0	880.8	885.5	893.3	891.7	887.1	890.1	893.3
10°	865.4	873.1	877.8	882.4	879.3	885.5	891.7	891.7	888.7	891.7	896.4
12.5°	862.2	870.0	874.7	879.3	876.2	884.0	891.7	890.1	888.7	891.7	896.4
15°	857.5	865.4	870.0	874.7	873.1	880.8	888.7	888.7	885.5	890.1	894.8
17.5°	846.7	854.5	860.7	863.8	862.2	870.0	877.8	877.8	874.7	879.3	884.0
20°	828.1	835.8	842.1	845.1	843.5	849.8	857.5	859.1	856.0	860.7	865.4
22.5°	804.8	810.9	817.2	820.2	818.8	824.9	832.7	834.2	831.2	835.8	838.9
25°	776.8	781.5	787.6	790.8	789.2	795.5	803.2	803.2	801.6	804.8	807.8
27.5°	737.9	744.2	748.8	751.9	751.9	756.6	762.8	764.3	762.8	765.9	770.6
30°	689.7	692.9	699.1	700.7	702.2	706.9	713.1	713.1	711.6	714.6	719.3
32.5°	629.2	633.8	638.5	640.1	641.7	646.3	651.0	652.5	651.0	654.1	658.7
35°	557.8	562.4	567.1	568.6	570.2	574.8	579.5	581.1	579.5	582.6	587.2
37.5°	478.5	481.6	486.3	487.9	490.9	494.0	497.2	500.3	498.7	501.8	504.9
40°	397.7	399.3	404.0	405.5	408.6	411.7	414.8	416.4	416.4	417.9	419.4
42.5°	321.6	324.7	327.8	329.3	332.5	334.0	337.1	338.7	338.7	340.2	341.8
45°	256.3	259.4	262.6	264.1	267.2	268.7	270.3	271.9	270.3	270.3	273.4
47.5°	202.0	205.1	208.1	209.7	211.3	212.8	214.4	214.4	214.4	216.0	216.0
50°	158.5	160.0	163.1	163.1	166.2	166.2	167.8	167.8	167.8	167.8	169.4
52.5°	122.8	124.2	127.4	127.4	128.9	130.5	130.5	130.5	130.5	132.1	130.5
55°	93.2	94.8	96.3	96.3	99.5	99.5	99.5	99.5	99.5	99.5	99.5
57.5°	69.9	71.5	73.0	73.0	73.0	74.6	73.0	74.6	74.6	74.6	74.6
60°	51.3	52.9	52.9	52.9	54.3	54.3	54.3	54.3	54.3	54.3	54.3
62.5°	35.7	35.7	37.3	37.3	37.3	38.9	37.3	37.3	38.9	38.9	37.3
65°	24.9	24.9	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4
67.5°	17.1	17.1	17.1	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6
70°	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4
72.5°	7.7	7.7	7.7	7.7	9.3	9.3	9.3	9.3	9.3	9.3	9.3
75°	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
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



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CATALOG NUMBER: LD6A15D010TE ERW6A15935 6LW111H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	866.8	866.8	866.8	866.8
2.5°	871.5	870.0	871.5	866.8
5°	885.5	884.0	887.1	880.8
7.5°	894.8	893.3	896.4	890.1
10°	896.4	896.4	899.5	893.3
12.5°	896.4	896.4	899.5	893.3
15°	896.4	894.8	898.0	891.7
17.5°	885.5	885.5	888.7	882.4
20°	865.4	865.4	868.4	863.8
22.5°	840.5	840.5	842.1	837.4
25°	809.4	807.8	810.9	807.8
27.5°	770.6	769.0	770.6	767.5
30°	717.7	716.2	719.3	716.2
32.5°	658.7	655.6	658.7	655.6
35°	585.7	582.6	585.7	584.1
37.5°	504.9	501.8	504.9	503.3
40°	419.4	417.9	421.0	419.4
42.5°	341.8	338.7	341.8	340.2
45°	273.4	270.3	273.4	271.9
47.5°	216.0	214.4	217.5	216.0
50°	169.4	167.8	169.4	169.4
52.5°	130.5	128.9	130.5	130.5
55°	99.5	97.9	99.5	99.5
57.5°	74.6	73.0	74.6	74.6
60°	54.3	54.3	54.3	54.3
62.5°	38.9	37.3	38.9	38.9
65°	26.4	26.4	26.4	26.4
67.5°	18.6	18.6	18.6	18.6
70°	12.4	12.4	12.4	12.4
72.5°	9.3	9.3	9.3	7.7
75°	6.2	6.2	6.2	6.2
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)