

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: P136394

Luminaire Tested: **LD6A15D010TE ERW6A15835 6LW111H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136394
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 ERW6A15835 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: 1538.0 lumens
Efficiency: N/A
Efficacy: 68.1 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

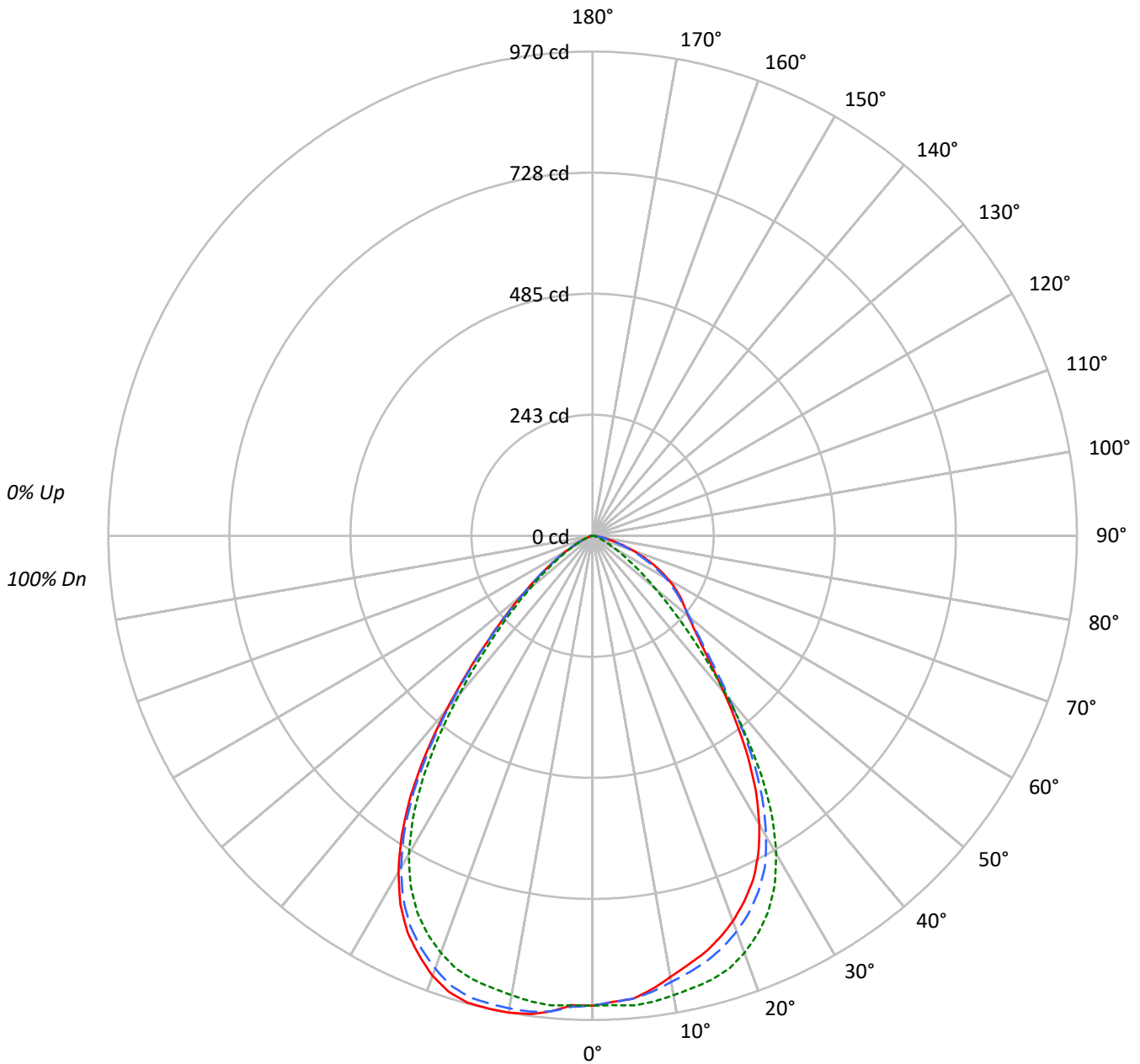
Input Watts (W): 22.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	61404	61404	61404
5°	60978	61862	62634
10°	59450	61908	64253
15°	58444	62206	65394
20°	57035	61721	65116
25°	54766	59863	63138
30°	50323	55408	58579
35°	43263	47157	50510
40°	34765	35480	38784
45°	28325	24588	27236
50°	25334	16432	18665
55°	24364	10749	12284
60°	22886	6824	7698
65°	20315	4168	4430
70°	16405	2575	2575
75°	11469	1689	1689
80°	7589	1277	1277
85°	3818	1273	1273



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.6	5.8
10°-20°	258.4	16.8
20°-30°	376.3	24.5
30°-40°	365.0	23.7
40°-50°	230.7	15.0
50°-60°	128.5	8.4
60°-70°	63.6	4.1
70°-80°	22.4	1.5
80°-90°	3.5	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°	724.3	47.1
0°-40°	1089.3	70.8
0°-60°	1448.4	94.2
0°-90°	1538.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1538.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	941	941	941	941	941	
5°	931	931	945	956	956	88
15°	865	882	921	956	968	243
25°	761	786	832	864	877	347
35°	543	568	592	624	634	337
45°	307	315	266	292	295	243
55°	214	209	94	108	108	191
65°	132	122	27	29	29	129
75°	46	42	7	7	7	51
85°	5	5	2	2	2	8
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°	941.2	941.2	941.2	941.2	941.2	941.2	941.2	941.2	941.2	941.2	941.2
2.5°	934.5	926.1	929.4	927.8	929.4	927.8	932.8	927.8	931.1	934.5	927.8
5°	931.1	922.7	924.4	924.4	924.4	924.4	929.4	924.4	927.8	931.1	926.1
7.5°	915.9	909.2	910.9	910.9	910.9	910.9	915.9	912.6	915.9	921.0	915.9
10°	897.4	890.6	894.0	894.0	894.0	894.0	900.8	897.4	900.8	907.5	902.5
12.5°	880.5	875.5	878.8	878.8	878.8	880.5	885.6	883.9	887.3	895.7	890.6
15°	865.3	860.3	863.7	863.7	863.7	865.3	870.4	872.1	875.5	882.2	878.8
17.5°	845.1	840.0	845.1	845.1	843.4	846.8	853.5	853.5	856.9	865.3	863.7
20°	821.5	816.4	821.5	821.5	819.8	823.2	829.9	831.6	835.0	843.4	841.7
22.5°	792.8	791.1	792.8	796.2	794.5	796.2	802.9	804.6	808.0	818.1	816.4
25°	760.8	759.1	762.4	764.1	762.4	764.1	770.9	772.6	775.9	786.1	786.1
27.5°	718.6	716.9	722.0	722.0	722.0	725.3	730.4	733.8	735.5	747.3	745.6
30°	668.0	666.3	669.7	671.4	671.4	671.4	678.1	683.2	684.9	695.0	695.0
32.5°	608.9	608.9	610.6	614.0	612.3	615.7	620.8	624.1	627.5	635.9	635.9
35°	543.2	544.8	546.5	549.9	548.2	549.9	555.0	558.3	560.0	568.5	566.8
37.5°	474.0	475.7	477.4	479.1	479.1	480.7	485.8	487.5	489.2	495.9	492.6
40°	408.2	408.2	409.9	413.3	411.6	415.0	418.3	420.0	420.0	425.1	421.7
42.5°	350.9	352.5	354.2	355.9	355.9	357.6	361.0	362.7	362.7	364.4	359.3
45°	307.0	308.7	308.7	312.1	312.1	313.7	315.4	317.1	315.4	315.4	310.4
47.5°	275.0	276.6	278.3	280.0	280.0	281.7	283.4	283.4	281.7	280.0	273.3
50°	249.6	253.0	253.0	254.7	256.4	258.1	258.1	258.1	254.7	253.0	242.9
52.5°	231.1	232.8	234.5	236.2	236.2	237.8	239.5	237.8	234.5	229.4	219.3
55°	214.2	215.9	217.6	219.3	219.3	219.3	219.3	217.6	214.2	209.2	199.0
57.5°	195.7	197.4	199.0	200.7	200.7	200.7	200.7	199.0	195.7	188.9	177.1
60°	175.4	177.1	178.8	180.5	180.5	180.5	178.8	177.1	173.7	168.7	156.9
62.5°	153.5	155.2	156.9	156.9	156.9	155.2	155.2	153.5	150.1	145.1	133.3
65°	131.6	131.6	133.3	133.3	133.3	133.3	131.6	129.9	126.5	121.5	113.0
67.5°	108.0	109.6	109.6	109.6	109.6	109.6	108.0	108.0	104.6	99.5	92.8
70°	86.0	86.0	87.7	87.7	87.7	87.7	86.0	86.0	82.7	79.3	72.5
72.5°	64.1	64.1	64.1	65.8	65.8	65.8	64.1	64.1	62.4	59.0	54.0
75°	45.5	45.5	45.5	47.2	47.2	47.2	47.2	45.5	43.9	42.2	38.8
77.5°	30.4	32.0	30.4	30.4	30.4	32.0	30.4	30.4	30.4	28.7	25.3
80°	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	18.6	18.6	16.9
82.5°	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	10.1	10.1
85°	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
87.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
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°	941.2	941.2	941.2	941.2	941.2	941.2	941.2	941.2	941.2	941.2	941.2
2.5°	932.8	936.2	939.6	936.2	931.1	941.2	939.6	941.2	939.6	936.2	946.3
5°	931.1	934.5	939.6	936.2	932.8	942.9	941.2	944.6	944.6	941.2	951.4
7.5°	921.0	924.4	932.8	929.4	926.1	936.2	937.9	941.2	942.9	939.6	951.4
10°	909.2	912.6	921.0	919.3	917.6	929.4	931.1	934.5	936.2	934.5	946.3
12.5°	897.4	902.5	910.9	909.2	909.2	921.0	922.7	927.8	931.1	929.4	942.9
15°	885.6	892.3	902.5	900.8	900.8	914.3	915.9	921.0	924.4	924.4	937.9
17.5°	870.4	877.1	887.3	885.6	889.0	899.1	902.5	909.2	912.6	910.9	926.1
20°	848.5	856.9	867.0	865.3	867.0	880.5	883.9	889.0	892.3	892.3	905.8
22.5°	823.2	831.6	841.7	840.0	843.4	853.5	856.9	863.7	867.0	865.3	878.8
25°	792.8	801.2	809.7	809.7	811.4	823.2	826.5	831.6	836.7	835.0	846.8
27.5°	752.3	760.8	769.2	767.5	769.2	781.0	784.4	789.4	794.5	792.8	804.6
30°	700.0	708.5	715.2	713.5	715.2	727.0	728.7	735.5	740.5	740.5	750.6
32.5°	639.3	647.7	651.1	647.7	651.1	659.5	662.9	669.7	673.0	674.7	684.9
35°	570.1	575.2	576.9	573.5	573.5	582.0	585.3	592.1	595.4	597.1	605.6
37.5°	494.2	497.6	494.2	489.2	490.9	494.2	499.3	504.4	509.4	511.1	519.5
40°	420.0	418.3	413.3	404.8	403.2	408.2	411.6	416.6	420.0	423.4	428.5
42.5°	354.2	350.9	340.7	330.6	328.9	328.9	330.6	335.7	339.1	340.7	347.5
45°	301.9	295.2	280.0	268.2	261.5	263.1	263.1	266.5	268.2	271.6	276.6
47.5°	261.5	249.6	231.1	215.9	209.2	207.5	207.5	209.2	210.9	214.2	217.6
50°	229.4	214.2	192.3	175.4	167.0	163.6	163.6	161.9	165.3	167.0	170.4
52.5°	204.1	185.6	160.2	141.7	131.6	128.2	126.5	126.5	126.5	128.2	131.6
55°	180.5	160.2	133.3	114.7	102.9	99.5	96.1	94.5	96.1	97.8	99.5
57.5°	160.2	138.3	111.3	91.1	81.0	75.9	72.5	70.8	70.8	72.5	74.2
60°	140.0	118.1	91.1	72.5	62.4	57.4	54.0	52.3	52.3	54.0	54.0
62.5°	118.1	97.8	74.2	57.4	47.2	42.2	38.8	38.8	37.1	37.1	38.8
65°	99.5	81.0	60.7	45.5	35.4	32.0	28.7	27.0	27.0	25.3	27.0
67.5°	81.0	65.8	48.9	35.4	27.0	23.6	20.2	20.2	18.6	18.6	18.6
70°	64.1	52.3	38.8	27.0	21.9	16.9	15.2	13.5	13.5	13.5	13.5
72.5°	47.2	38.8	28.7	20.2	15.2	13.5	11.8	10.1	8.4	8.4	8.4
75°	33.7	27.0	20.2	15.2	11.8	10.1	8.4	6.7	6.7	6.7	6.7
77.5°	23.6	18.6	15.2	10.1	8.4	6.7	5.1	5.1	5.1	5.1	3.4
80°	15.2	11.8	10.1	6.7	5.1	5.1	3.4	3.4	3.4	3.4	3.4
82.5°	8.4	6.7	5.1	5.1	3.4	3.4	1.7	1.7	1.7	1.7	1.7
85°	3.4	3.4	3.4	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
87.5°	1.7	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°	941.2	941.2	941.2	941.2	941.2	941.2	941.2	941.2	941.2	941.2	941.2
2.5°	936.2	942.9	942.9	946.3	941.2	944.6	949.7	948.0	942.9	944.6	946.3
5°	942.9	949.7	951.4	956.4	951.4	956.4	963.2	961.5	956.4	959.8	961.5
7.5°	942.9	951.4	954.7	959.8	956.4	961.5	969.9	968.2	963.2	966.5	969.9
10°	939.6	948.0	953.1	958.1	954.7	961.5	968.2	968.2	964.9	968.2	973.3
12.5°	936.2	944.6	949.7	954.7	951.4	959.8	968.2	966.5	964.9	968.2	973.3
15°	931.1	939.6	944.6	949.7	948.0	956.4	964.9	964.9	961.5	966.5	971.6
17.5°	919.3	927.8	934.5	937.9	936.2	944.6	953.1	953.1	949.7	954.7	959.8
20°	899.1	907.5	914.3	917.6	915.9	922.7	931.1	932.8	929.4	934.5	939.6
22.5°	873.8	880.5	887.3	890.6	889.0	895.7	904.1	905.8	902.5	907.5	910.9
25°	843.4	848.5	855.2	858.6	856.9	863.7	872.1	872.1	870.4	873.8	877.1
27.5°	801.2	808.0	813.0	816.4	816.4	821.5	828.2	829.9	828.2	831.6	836.7
30°	748.9	752.3	759.1	760.8	762.4	767.5	774.3	774.3	772.6	775.9	781.0
32.5°	683.2	688.2	693.3	695.0	696.7	701.7	706.8	708.5	706.8	710.2	715.2
35°	605.6	610.6	615.7	617.4	619.1	624.1	629.2	630.9	629.2	632.6	637.6
37.5°	519.5	522.9	528.0	529.7	533.0	536.4	539.8	543.2	541.5	544.8	548.2
40°	431.8	433.5	438.6	440.3	443.6	447.0	450.4	452.1	452.1	453.8	455.4
42.5°	349.2	352.5	355.9	357.6	361.0	362.7	366.0	367.7	367.7	369.4	371.1
45°	278.3	281.7	285.1	286.8	290.1	291.8	293.5	295.2	293.5	293.5	296.9
47.5°	219.3	222.7	226.0	227.7	229.4	231.1	232.8	232.8	232.8	234.5	234.5
50°	172.1	173.7	177.1	177.1	180.5	180.5	182.2	182.2	182.2	182.2	183.9
52.5°	133.3	134.9	138.3	138.3	140.0	141.7	141.7	141.7	141.7	143.4	141.7
55°	101.2	102.9	104.6	104.6	108.0	108.0	108.0	108.0	108.0	108.0	108.0
57.5°	75.9	77.6	79.3	79.3	79.3	81.0	79.3	81.0	81.0	81.0	81.0
60°	55.7	57.4	57.4	57.4	59.0	59.0	59.0	59.0	59.0	59.0	59.0
62.5°	38.8	38.8	40.5	40.5	40.5	42.2	40.5	40.5	42.2	42.2	40.5
65°	27.0	27.0	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7
67.5°	18.6	18.6	18.6	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2
70°	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
72.5°	8.4	8.4	8.4	8.4	10.1	10.1	10.1	10.1	10.1	10.1	10.1
75°	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
77.5°	3.4	3.4	5.1	5.1	5.1	3.4	3.4	3.4	5.1	5.1	3.4
80°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
82.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
85°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.0	1.7	1.7	1.7
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 ERW6A15835 6LW111H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	941.2	941.2	941.2	941.2
2.5°	946.3	944.6	946.3	941.2
5°	961.5	959.8	963.2	956.4
7.5°	971.6	969.9	973.3	966.5
10°	973.3	973.3	976.7	969.9
12.5°	973.3	973.3	976.7	969.9
15°	973.3	971.6	975.0	968.2
17.5°	961.5	961.5	964.9	958.1
20°	939.6	939.6	942.9	937.9
22.5°	912.6	912.6	914.3	909.2
25°	878.8	877.1	880.5	877.1
27.5°	836.7	835.0	836.7	833.3
30°	779.3	777.6	781.0	777.6
32.5°	715.2	711.8	715.2	711.8
35°	635.9	632.6	635.9	634.2
37.5°	548.2	544.8	548.2	546.5
40°	455.4	453.8	457.1	455.4
42.5°	371.1	367.7	371.1	369.4
45°	296.9	293.5	296.9	295.2
47.5°	234.5	232.8	236.2	234.5
50°	183.9	182.2	183.9	183.9
52.5°	141.7	140.0	141.7	141.7
55°	108.0	106.3	108.0	108.0
57.5°	81.0	79.3	81.0	81.0
60°	59.0	59.0	59.0	59.0
62.5°	42.2	40.5	42.2	42.2
65°	28.7	28.7	28.7	28.7
67.5°	20.2	20.2	20.2	20.2
70°	13.5	13.5	13.5	13.5
72.5°	10.1	10.1	10.1	8.4
75°	6.7	6.7	6.7	6.7
77.5°	5.1	3.4	5.1	5.1
80°	3.4	3.4	3.4	3.4
82.5°	1.7	1.7	1.7	1.7
85°	1.7	1.7	1.7	1.7
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)