

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: P136518

Luminaire Tested: **LD6A15D010TE ERW6A15935 6LW121LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136518
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 ERW6A15935 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 3500K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1601.6 lumens
Efficiency: N/A
Efficacy: 70.9 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

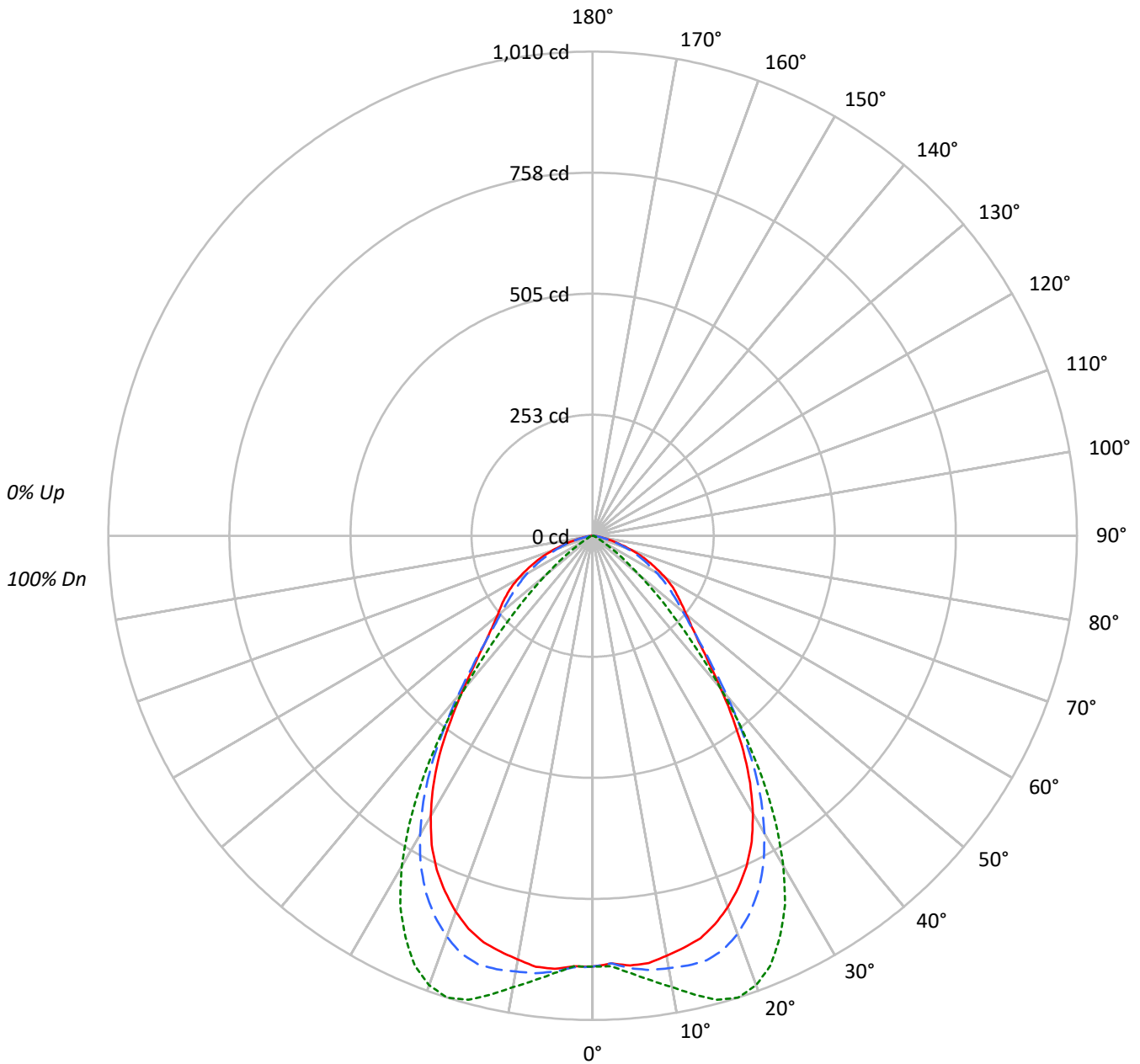
Input Watts (W): 22.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P136518

CATALOG NUMBER: LD6A15D010TE ERW6A15935 6LW121LI

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								
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°	58638	58638	58638
5°	58934	59982	59386
10°	58933	63339	59463
15°	58694	67677	59315
20°	57229	69247	57944
25°	54709	66507	55371
30°	50353	59935	50865
35°	43645	49124	44282
40°	35344	35344	35829
45°	28879	22429	29405
50°	25831	12799	26298
55°	24387	6518	25160
60°	22886	2831	23487
65°	20007	1590	20701
70°	16176	1316	16824
75°	11268	857	11570
80°	6875	413	6875
85°	3443	823	3443



TEST NUMBER: P136518

CATALOG NUMBER: LD6A15D010TE ERW6A15935 6LW121LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.4	5.5
10°-20°	262.0	16.4
20°-30°	381.1	23.8
30°-40°	362.2	22.6
40°-50°	234.7	14.7
50°-60°	147.2	9.2
60°-70°	88.0	5.5
70°-80°	34.3	2.1
80°-90°	4.7	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°	730.5	45.6
0°-40°	1092.7	68.2
0°-60°	1474.6	92.1
0°-90°	1601.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1601.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	899	899	899	899	899	
5°	900	906	916	912	907	86
15°	869	917	1002	925	878	244
25°	760	817	924	822	769	347
35°	548	585	617	587	556	339
45°	313	318	243	319	319	247
55°	214	197	57	200	221	192
65°	130	114	10	116	134	128
75°	45	39	3	40	46	50
85°	5	5	1	5	5	7
90°	0	0	0	0	0	



TEST NUMBER: P136518

CATALOG NUMBER: LD6A15D010TE ERW6A15935 6LW121LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	898.8	898.8	898.8	898.8	898.8	898.8	898.8	898.8	898.8	898.8	898.8
2.5°	893.0	887.3	903.3	894.2	895.3	906.8	897.6	894.2	905.6	893.0	898.8
5°	899.9	895.3	911.4	903.3	904.5	915.9	907.9	904.5	917.1	905.6	911.4
7.5°	898.8	895.3	910.2	903.3	904.5	918.2	910.2	909.1	923.9	913.6	921.7
10°	889.6	885.0	901.0	895.3	897.6	912.5	905.6	905.6	922.8	915.9	927.4
12.5°	880.4	875.9	891.9	887.3	889.6	905.6	901.0	903.3	922.8	918.2	933.2
15°	869.0	864.4	881.6	877.0	879.3	896.5	894.2	896.5	918.2	917.1	934.3
17.5°	849.4	847.1	862.1	859.8	862.1	879.3	878.2	881.6	905.6	905.6	927.4
20°	824.3	820.8	836.8	834.6	835.7	852.9	852.9	856.3	881.6	883.9	905.6
22.5°	794.5	792.2	808.2	804.8	807.1	823.1	823.1	826.5	850.6	854.0	877.0
25°	760.0	757.8	772.6	771.5	772.6	788.7	787.5	792.2	815.1	817.4	839.1
27.5°	718.7	715.3	730.3	730.3	731.4	746.3	746.3	748.6	769.2	771.5	792.2
30°	668.4	664.9	678.7	679.8	679.8	694.7	694.7	695.8	715.3	716.4	734.9
32.5°	611.0	611.0	621.3	622.5	622.5	636.2	637.4	637.4	654.6	654.6	669.5
35°	548.0	549.1	557.1	558.3	559.4	572.0	572.0	570.9	585.8	584.7	597.3
37.5°	480.3	480.3	488.3	489.5	489.5	500.9	500.9	499.8	512.4	509.0	518.2
40°	415.0	415.0	421.9	424.1	423.0	432.2	432.2	431.0	440.2	435.6	440.2
42.5°	357.7	359.9	364.5	365.7	364.5	372.5	371.4	370.2	377.1	370.2	371.4
45°	313.0	315.3	318.7	319.9	318.7	324.5	323.3	321.0	324.5	317.6	314.2
47.5°	279.7	280.9	286.6	285.4	284.3	288.9	288.9	284.3	285.4	276.3	269.4
50°	254.5	255.7	260.3	260.3	258.0	262.5	260.3	255.7	254.5	244.2	233.8
52.5°	233.8	235.0	239.6	239.6	237.3	240.7	238.4	231.5	230.4	220.1	207.5
55°	214.4	215.5	220.1	220.1	217.8	220.1	216.7	210.9	208.6	197.2	183.5
57.5°	197.2	196.0	199.5	199.5	197.2	198.3	196.0	190.3	185.7	175.4	161.6
60°	175.4	174.3	176.6	176.6	174.3	175.4	173.1	166.2	163.9	153.6	139.9
62.5°	151.3	151.3	153.6	153.6	151.3	151.3	150.2	143.3	141.0	131.8	120.4
65°	129.6	129.6	131.8	131.8	129.6	130.7	128.4	123.8	121.5	113.5	103.2
67.5°	107.8	107.8	108.9	108.9	107.8	107.8	106.7	103.2	99.7	94.0	84.8
70°	84.8	84.8	86.0	86.0	84.8	84.8	84.8	81.4	80.2	74.5	67.6
72.5°	63.1	63.1	64.2	64.2	64.2	65.3	64.2	61.9	59.6	56.2	50.5
75°	44.7	44.7	44.7	45.9	44.7	44.7	45.9	43.6	42.5	39.0	35.6
77.5°	29.8	29.8	29.8	29.8	29.8	30.9	29.8	29.8	28.6	26.3	24.0
80°	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	17.2	17.2	14.9
82.5°	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	9.2	8.0
85°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	3.4
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



TEST NUMBER: P136518

CATALOG NUMBER: LD6A15D010TE ERW6A15935 6LW121LI

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	898.8	898.8	898.8	898.8	898.8	898.8	898.8	898.8	898.8	898.8	898.8
2.5°	897.6	898.8	898.8	902.2	905.6	896.5	901.0	898.8	896.5	905.6	899.9
5°	912.5	913.6	913.6	918.2	922.8	912.5	917.1	915.9	913.6	921.7	915.9
7.5°	923.9	927.4	929.7	935.5	941.2	932.1	937.8	935.5	934.3	942.4	934.3
10°	932.1	938.9	942.4	951.5	959.5	950.4	958.4	956.1	954.9	961.8	952.7
12.5°	941.2	950.4	959.5	969.8	981.3	973.3	983.6	980.1	980.1	985.9	974.4
15°	946.9	958.4	971.0	985.9	999.7	993.9	1005.4	1002.0	1002.0	1006.6	993.9
17.5°	941.2	956.1	971.0	988.1	1004.3	1000.8	1013.4	1010.0	1008.9	1013.4	998.5
20°	921.7	938.9	956.1	973.3	991.6	989.3	1003.1	997.4	998.5	1000.8	985.9
22.5°	890.7	909.1	926.2	944.6	961.8	960.7	973.3	969.8	968.7	972.1	956.1
25°	854.0	870.1	886.2	902.2	919.4	917.1	929.7	923.9	925.1	926.2	912.5
27.5°	804.8	819.7	832.3	846.0	862.1	858.6	871.3	869.0	865.6	866.7	855.2
30°	744.0	756.6	765.8	777.2	789.8	786.4	797.9	795.6	793.3	793.3	786.4
32.5°	675.2	684.4	690.1	698.1	707.3	703.9	713.0	710.7	708.4	708.4	703.9
35°	598.4	604.2	604.2	608.7	615.6	609.9	617.9	616.8	613.3	614.5	613.3
37.5°	514.7	517.0	512.4	512.4	517.0	509.0	515.9	515.9	512.4	513.5	513.5
40°	433.3	432.2	423.0	418.4	418.4	410.4	416.1	415.0	412.7	413.8	416.1
42.5°	361.1	354.2	341.6	332.5	330.2	321.0	324.5	323.3	321.0	323.3	326.7
45°	300.3	287.7	270.6	258.0	252.2	243.1	244.2	243.1	241.9	244.2	249.9
47.5°	252.2	235.0	213.2	197.2	189.2	178.9	178.9	177.7	177.7	183.5	186.9
50°	214.4	193.8	168.5	150.2	138.7	129.6	127.3	126.1	127.3	131.8	138.7
52.5°	185.7	160.5	133.0	113.5	100.8	90.5	88.2	87.1	88.2	92.8	99.7
55°	160.5	134.1	105.5	83.7	69.9	60.8	57.3	57.3	57.3	63.1	69.9
57.5°	137.6	111.2	82.5	60.8	48.2	39.0	35.6	34.4	36.7	40.2	47.0
60°	118.1	92.8	65.3	45.9	33.2	25.2	21.7	21.7	21.7	26.3	33.2
62.5°	100.8	77.9	52.8	34.4	24.0	17.2	13.7	13.7	14.9	17.2	24.0
65°	86.0	66.5	44.7	29.8	19.5	13.7	11.4	10.3	11.4	13.7	19.5
67.5°	71.1	55.0	37.9	25.2	17.2	11.4	10.3	9.2	9.2	12.6	16.0
70°	56.2	43.6	30.9	20.6	13.7	9.2	8.0	6.9	8.0	10.3	13.7
72.5°	42.5	33.2	22.9	16.0	10.3	8.0	5.7	5.7	5.7	8.0	10.3
75°	29.8	24.0	17.2	11.4	6.9	4.6	4.6	3.4	4.6	5.7	6.9
77.5°	19.5	16.0	11.4	6.9	4.6	3.4	2.3	2.3	2.3	3.4	4.6
80°	12.6	10.3	6.9	4.6	3.4	2.3	1.1	1.1	1.1	2.3	2.3
82.5°	6.9	5.7	3.4	2.3	2.3	1.1	1.1	1.1	1.1	1.1	1.1
85°	3.4	2.3	2.3	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



TEST NUMBER: P136518

CATALOG NUMBER: LD6A15D010TE ERW6A15935 6LW121LI

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	898.8	898.8	898.8	898.8	898.8	898.8	898.8	898.8	898.8	898.8	898.8
2.5°	901.0	897.6	902.2	905.6	904.5	901.0	906.8	897.6	901.0	897.6	891.9
5°	917.1	913.6	917.1	919.4	918.2	912.5	917.1	909.1	911.4	906.8	901.0
7.5°	934.3	929.7	930.9	932.1	928.6	920.5	923.9	913.6	914.8	909.1	902.2
10°	950.4	943.5	942.4	940.1	933.2	922.8	923.9	911.4	910.2	902.2	894.2
12.5°	971.0	959.5	954.9	950.4	940.1	926.2	923.9	909.1	906.8	897.6	888.5
15°	985.9	973.3	965.3	956.1	942.4	925.1	920.5	903.3	898.8	888.5	879.3
17.5°	989.3	973.3	961.8	950.4	934.3	913.6	906.8	888.5	882.7	871.3	862.1
20°	974.4	957.2	944.6	929.7	913.6	889.6	882.7	863.3	856.3	846.0	836.8
22.5°	945.8	926.2	913.6	898.8	882.7	859.8	851.7	833.4	826.5	816.2	807.1
25°	904.5	886.2	873.6	859.8	844.9	822.0	815.1	797.9	792.2	781.8	772.6
27.5°	847.1	830.0	823.1	809.4	795.6	776.1	769.2	754.3	748.6	741.7	731.4
30°	778.4	763.5	760.0	747.5	737.2	719.9	714.2	701.6	695.8	690.1	681.0
32.5°	699.3	687.8	687.8	677.5	670.7	656.9	652.3	641.9	637.4	632.8	624.8
35°	609.9	601.9	606.5	599.6	596.2	587.0	583.5	575.4	572.0	568.6	560.6
37.5°	514.7	509.0	518.2	519.4	519.4	511.2	509.0	504.4	502.1	498.7	491.8
40°	420.7	419.6	433.3	435.6	442.5	437.9	439.0	435.6	433.3	431.0	426.4
42.5°	333.6	338.2	355.4	365.7	372.5	372.5	376.0	374.8	373.7	371.4	368.0
45°	259.1	268.3	288.9	301.5	315.3	318.7	324.5	324.5	325.6	324.5	321.0
47.5°	198.3	212.1	236.1	255.7	270.6	277.4	285.4	287.7	288.9	288.9	286.6
50°	150.2	167.3	194.9	216.7	237.3	246.5	255.7	259.1	263.7	262.5	260.3
52.5°	113.5	133.0	162.7	189.2	210.9	221.2	231.5	236.1	240.7	240.7	239.6
55°	83.7	104.3	136.4	163.9	186.9	199.5	209.8	214.4	220.1	221.2	220.1
57.5°	60.8	81.4	112.4	142.1	163.9	177.7	188.0	192.6	198.3	199.5	199.5
60°	44.7	65.3	95.1	122.7	143.3	157.0	165.0	170.8	175.4	177.7	177.7
62.5°	34.4	52.8	80.2	105.5	123.8	135.3	143.3	147.9	152.4	153.6	154.7
65°	28.6	44.7	67.6	89.4	105.5	115.8	122.7	127.3	130.7	131.8	131.8
67.5°	24.0	37.9	56.2	73.4	87.1	95.1	100.8	104.3	107.8	108.9	108.9
70°	19.5	29.8	44.7	58.5	68.8	75.7	80.2	83.7	86.0	86.0	86.0
72.5°	14.9	22.9	33.2	43.6	51.6	57.3	60.8	61.9	64.2	64.2	64.2
75°	10.3	16.0	24.0	30.9	35.6	40.2	42.5	43.6	44.7	45.9	44.7
77.5°	6.9	10.3	14.9	19.5	24.0	26.3	27.5	28.6	29.8	29.8	29.8
80°	4.6	6.9	9.2	12.6	14.9	16.0	17.2	17.2	18.3	18.3	18.3
82.5°	2.3	3.4	5.7	6.9	8.0	9.2	9.2	9.2	10.3	10.3	9.2
85°	1.1	1.1	2.3	3.4	3.4	4.6	4.6	4.6	4.6	4.6	4.6
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: P136518

CATALOG NUMBER: LD6A15D010TE ERW6A15935 6LW121LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	898.8	898.8	898.8	898.8
2.5°	894.2	896.5	887.3	898.8
5°	902.2	904.5	895.3	906.8
7.5°	903.3	904.5	895.3	906.8
10°	895.3	895.3	886.2	897.6
12.5°	888.5	887.3	877.0	888.5
15°	878.2	877.0	866.7	878.2
17.5°	861.0	859.8	849.4	859.8
20°	834.6	833.4	824.3	834.6
22.5°	805.9	803.6	794.5	803.6
25°	772.6	770.4	761.2	769.2
27.5°	730.3	728.0	718.7	726.9
30°	679.8	676.4	669.5	675.2
32.5°	622.5	620.2	612.2	619.0
35°	559.4	556.0	550.3	556.0
37.5°	490.6	488.3	482.6	486.1
40°	424.1	423.0	418.4	420.7
42.5°	366.8	364.5	361.1	363.4
45°	321.0	319.9	316.4	318.7
47.5°	286.6	285.4	282.0	284.3
50°	261.4	260.3	258.0	259.1
52.5°	240.7	239.6	237.3	240.7
55°	222.4	221.2	217.8	221.2
57.5°	201.8	200.6	197.2	201.8
60°	178.9	178.9	175.4	180.0
62.5°	155.9	155.9	153.6	157.0
65°	134.1	133.0	131.8	134.1
67.5°	110.1	108.9	108.9	111.2
70°	87.1	86.0	86.0	88.2
72.5°	65.3	64.2	64.2	65.3
75°	45.9	44.7	44.7	45.9
77.5°	29.8	29.8	29.8	29.8
80°	18.3	18.3	18.3	18.3
82.5°	10.3	10.3	9.2	10.3
85°	4.6	4.6	4.6	4.6
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)