

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: P136395

Luminaire Tested: **LD6A15D010TE ERW6A15840 6LW111H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136395
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 ERW6A15840 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 4000K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1570.0 lumens
Efficiency: N/A
Efficacy: 69.5 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

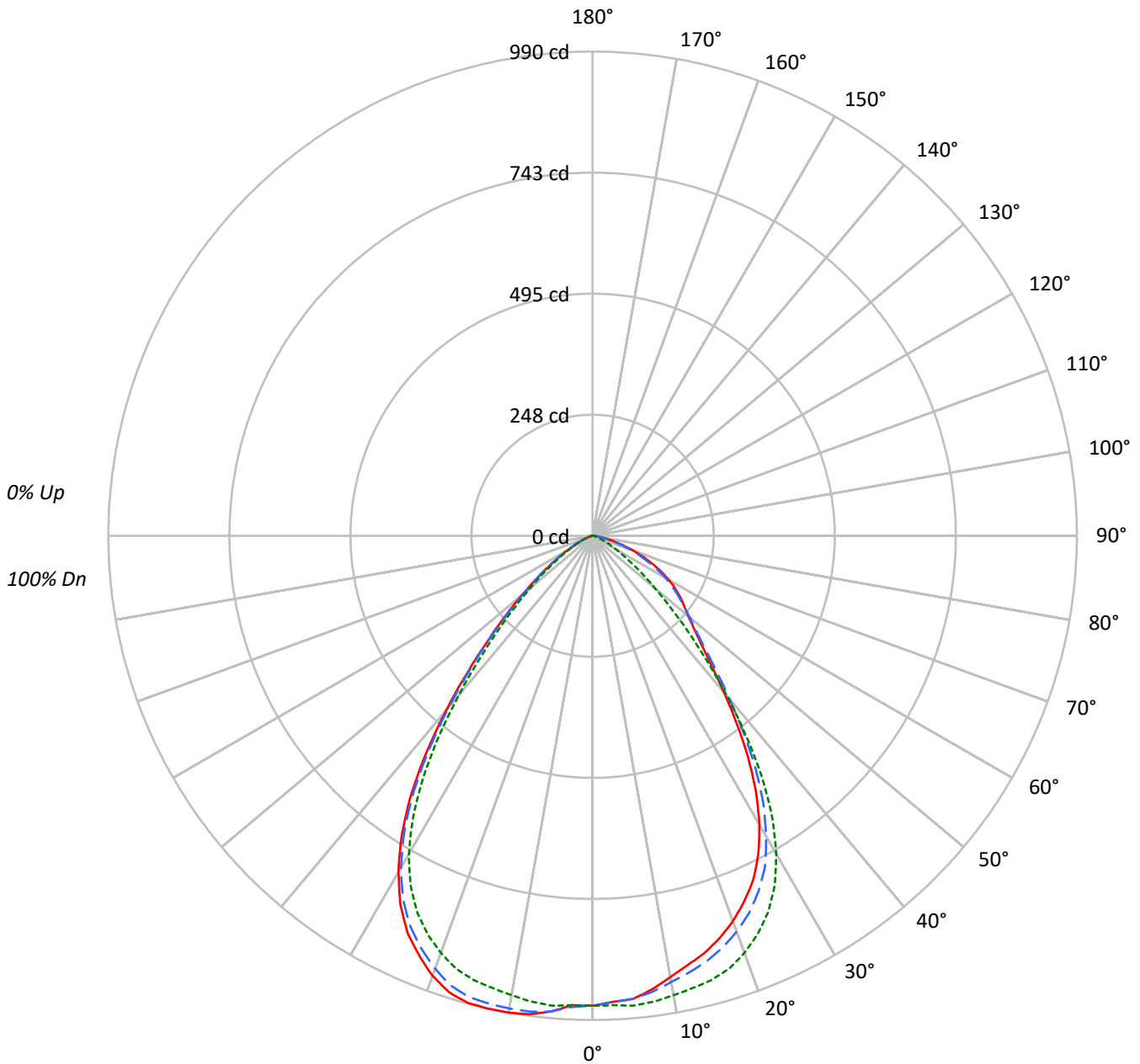
Input Watts (W): 22.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				90
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80				80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73	72				72
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64				64
5	85	74	67	62	83	73	67	61	71	65	61	70	64	60	68	63	60	58				58
6	79	68	61	56	78	68	61	55	66	60	55	64	59	55	63	58	54	52				52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48				48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44				44
9	66	54	47	42	65	54	47	42	53	46	42	52	46	42	51	46	42	40				40
10	62	51	44	39	61	50	43	39	49	43	39	48	43	39	48	42	39	37				37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	62683	62683	62683
5°	62248	63152	63938
10°	60689	63193	65591
15°	59660	63503	66759
20°	58222	63006	66470
25°	55904	61108	64455
30°	51370	56560	59800
35°	44163	48137	51562
40°	35489	36221	39593
45°	28916	25105	27799
50°	25861	16777	19051
55°	24876	10965	12535
60°	23369	6968	7868
65°	20732	4261	4523
70°	16748	2632	2632
75°	11721	1739	1739
80°	7777	1277	1277
85°	3892	1273	1273



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.5	5.8
10°-20°	263.7	16.8
20°-30°	384.1	24.5
30°-40°	372.6	23.7
40°-50°	235.5	15.0
50°-60°	131.1	8.4
60°-70°	65.0	4.1
70°-80°	22.9	1.5
80°-90°	3.6	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°	739.3	47.1
0°-40°	1111.9	70.8
0°-60°	1478.5	94.2
0°-90°	1570.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1570.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	961	961	961	961	961	
5°	950	950	964	976	976	90
15°	883	901	940	976	988	249
25°	777	802	849	882	895	354
35°	554	580	604	637	647	344
45°	313	322	272	298	301	248
55°	219	214	96	110	110	195
65°	134	124	28	29	29	132
75°	46	43	7	7	7	52
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°	960.8	960.8	960.8	960.8	960.8	960.8	960.8	960.8	960.8	960.8	960.8
2.5°	953.9	945.3	948.8	947.1	948.8	947.1	952.2	947.1	950.5	953.9	947.1
5°	950.5	941.9	943.6	943.6	943.6	943.6	948.8	943.6	947.1	950.5	945.3
7.5°	935.0	928.1	929.8	929.8	929.8	929.8	935.0	931.6	935.0	940.2	935.0
10°	916.1	909.2	912.6	912.6	912.6	912.6	919.5	916.1	919.5	926.4	921.2
12.5°	898.8	893.7	897.1	897.1	897.1	898.8	904.0	902.3	905.7	914.3	909.2
15°	883.3	878.2	881.6	881.6	881.6	883.3	888.5	890.2	893.7	900.6	897.1
17.5°	862.7	857.5	862.7	862.7	861.0	864.4	871.3	871.3	874.7	883.3	881.6
20°	838.6	833.4	838.6	838.6	836.9	840.3	847.2	848.9	852.4	861.0	859.2
22.5°	809.3	807.6	809.3	812.7	811.0	812.7	819.6	821.4	824.8	835.1	833.4
25°	776.6	774.9	778.3	780.0	778.3	780.0	786.9	788.6	792.1	802.4	802.4
27.5°	733.5	731.8	737.0	737.0	737.0	740.4	745.6	749.0	750.8	762.8	761.1
30°	681.9	680.2	683.6	685.3	685.3	685.3	692.2	697.4	699.1	709.4	709.4
32.5°	621.6	621.6	623.3	626.8	625.1	628.5	633.7	637.1	640.6	649.2	649.2
35°	554.5	556.2	557.9	561.3	559.6	561.3	566.5	570.0	571.7	580.3	578.6
37.5°	483.9	485.6	487.3	489.0	489.0	490.7	495.9	497.6	499.4	506.2	502.8
40°	416.7	416.7	418.4	421.9	420.1	423.6	427.0	428.8	428.8	433.9	430.5
42.5°	358.2	359.9	361.6	363.3	363.3	365.0	368.5	370.2	370.2	371.9	366.8
45°	313.4	315.1	315.1	318.6	318.6	320.3	322.0	323.7	322.0	322.0	316.8
47.5°	280.7	282.4	284.1	285.8	285.8	287.6	289.3	289.3	287.6	285.8	279.0
50°	254.8	258.3	258.3	260.0	261.7	263.5	263.5	263.5	260.0	258.3	248.0
52.5°	235.9	237.6	239.3	241.1	241.1	242.8	244.5	242.8	239.3	234.2	223.8
55°	218.7	220.4	222.1	223.8	223.8	223.8	223.8	222.1	218.7	213.5	203.2
57.5°	199.7	201.5	203.2	204.9	204.9	204.9	204.9	203.2	199.7	192.9	180.8
60°	179.1	180.8	182.5	184.2	184.2	184.2	182.5	180.8	177.4	172.2	160.1
62.5°	156.7	158.4	160.1	160.1	160.1	158.4	158.4	156.7	153.3	148.1	136.0
65°	134.3	134.3	136.0	136.0	136.0	136.0	134.3	132.6	129.1	124.0	115.4
67.5°	110.2	111.9	111.9	111.9	111.9	111.9	110.2	110.2	106.8	101.6	94.7
70°	87.8	87.8	89.5	89.5	89.5	89.5	87.8	87.8	84.4	80.9	74.0
72.5°	65.4	65.4	65.4	67.2	67.2	67.2	65.4	65.4	63.7	60.3	55.1
75°	46.5	46.5	46.5	48.2	48.2	48.2	48.2	46.5	44.8	43.0	39.6
77.5°	31.0	32.7	31.0	31.0	31.0	32.7	31.0	31.0	31.0	29.3	25.8
80°	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	18.9	18.9	17.2
82.5°	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	10.3	10.3
85°	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
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°	960.8	960.8	960.8	960.8	960.8	960.8	960.8	960.8	960.8	960.8	960.8
2.5°	952.2	955.7	959.1	955.7	950.5	960.8	959.1	960.8	959.1	955.7	966.0
5°	950.5	953.9	959.1	955.7	952.2	962.6	960.8	964.3	964.3	960.8	971.2
7.5°	940.2	943.6	952.2	948.8	945.3	955.7	957.4	960.8	962.6	959.1	971.2
10°	928.1	931.6	940.2	938.4	936.7	948.8	950.5	953.9	955.7	953.9	966.0
12.5°	916.1	921.2	929.8	928.1	928.1	940.2	941.9	947.1	950.5	948.8	962.6
15°	904.0	910.9	921.2	919.5	919.5	933.3	935.0	940.2	943.6	943.6	957.4
17.5°	888.5	895.4	905.7	904.0	907.5	917.8	921.2	928.1	931.6	929.8	945.3
20°	866.1	874.7	885.1	883.3	885.1	898.8	902.3	907.5	910.9	910.9	924.7
22.5°	840.3	848.9	859.2	857.5	861.0	871.3	874.7	881.6	885.1	883.3	897.1
25°	809.3	817.9	826.5	826.5	828.2	840.3	843.7	848.9	854.1	852.4	864.4
27.5°	768.0	776.6	785.2	783.5	785.2	797.2	800.7	805.9	811.0	809.3	821.4
30°	714.6	723.2	730.1	728.4	730.1	742.1	743.9	750.8	755.9	755.9	766.3
32.5°	652.6	661.2	664.7	661.2	664.7	673.3	676.7	683.6	687.0	688.8	699.1
35°	582.0	587.2	588.9	585.5	585.5	594.1	597.5	604.4	607.8	609.6	618.2
37.5°	504.5	508.0	504.5	499.4	501.1	504.5	509.7	514.9	520.0	521.7	530.4
40°	428.8	427.0	421.9	413.3	411.5	416.7	420.1	425.3	428.8	432.2	437.4
42.5°	361.6	358.2	347.8	337.5	335.8	335.8	337.5	342.7	346.1	347.8	354.7
45°	308.2	301.3	285.8	273.8	266.9	268.6	268.6	272.1	273.8	277.2	282.4
47.5°	266.9	254.8	235.9	220.4	213.5	211.8	211.8	213.5	215.2	218.7	222.1
50°	234.2	218.7	196.3	179.1	170.5	167.0	167.0	165.3	168.7	170.5	173.9
52.5°	208.4	189.4	163.6	144.6	134.3	130.9	129.1	129.1	129.1	130.9	134.3
55°	184.2	163.6	136.0	117.1	105.0	101.6	98.1	96.4	98.1	99.9	101.6
57.5°	163.6	141.2	113.6	93.0	82.7	77.5	74.0	72.3	72.3	74.0	75.8
60°	142.9	120.5	93.0	74.0	63.7	58.5	55.1	53.4	53.4	55.1	55.1
62.5°	120.5	99.9	75.8	58.5	48.2	43.0	39.6	39.6	37.9	37.9	39.6
65°	101.6	82.7	62.0	46.5	36.2	32.7	29.3	27.6	27.6	25.8	27.6
67.5°	82.7	67.2	49.9	36.2	27.6	24.1	20.7	20.7	18.9	18.9	18.9
70°	65.4	53.4	39.6	27.6	22.4	17.2	15.5	13.8	13.8	13.8	13.8
72.5°	48.2	39.6	29.3	20.7	15.5	13.8	12.1	10.3	8.6	8.6	8.6
75°	34.4	27.6	20.7	15.5	12.1	10.3	8.6	6.9	6.9	6.9	6.9
77.5°	24.1	18.9	15.5	10.3	8.6	6.9	5.2	5.2	5.2	5.2	3.4
80°	15.5	12.1	10.3	6.9	5.2	5.2	3.4	3.4	3.4	3.4	3.4
82.5°	8.6	6.9	5.2	5.2	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°	960.8	960.8	960.8	960.8	960.8	960.8	960.8	960.8	960.8	960.8	960.8
2.5°	955.7	962.6	962.6	966.0	960.8	964.3	969.4	967.7	962.6	964.3	966.0
5°	962.6	969.4	971.2	976.3	971.2	976.3	983.2	981.5	976.3	979.8	981.5
7.5°	962.6	971.2	974.6	979.8	976.3	981.5	990.1	988.4	983.2	986.7	990.1
10°	959.1	967.7	972.9	978.1	974.6	981.5	988.4	988.4	984.9	988.4	993.5
12.5°	955.7	964.3	969.4	974.6	971.2	979.8	988.4	986.7	984.9	988.4	993.5
15°	950.5	959.1	964.3	969.4	967.7	976.3	984.9	984.9	981.5	986.7	991.8
17.5°	938.4	947.1	953.9	957.4	955.7	964.3	972.9	972.9	969.4	974.6	979.8
20°	917.8	926.4	933.3	936.7	935.0	941.9	950.5	952.2	948.8	953.9	959.1
22.5°	892.0	898.8	905.7	909.2	907.5	914.3	922.9	924.7	921.2	926.4	929.8
25°	861.0	866.1	873.0	876.5	874.7	881.6	890.2	890.2	888.5	892.0	895.4
27.5°	817.9	824.8	830.0	833.4	833.4	838.6	845.5	847.2	845.5	848.9	854.1
30°	764.5	768.0	774.9	776.6	778.3	783.5	790.4	790.4	788.6	792.1	797.2
32.5°	697.4	702.5	707.7	709.4	711.2	716.3	721.5	723.2	721.5	724.9	730.1
35°	618.2	623.3	628.5	630.2	631.9	637.1	642.3	644.0	642.3	645.7	650.9
37.5°	530.4	533.8	539.0	540.7	544.1	547.6	551.0	554.5	552.7	556.2	559.6
40°	440.8	442.5	447.7	449.4	452.9	456.3	459.8	461.5	461.5	463.2	464.9
42.5°	356.4	359.9	363.3	365.0	368.5	370.2	373.7	375.4	375.4	377.1	378.8
45°	284.1	287.6	291.0	292.7	296.2	297.9	299.6	301.3	299.6	299.6	303.1
47.5°	223.8	227.3	230.7	232.5	234.2	235.9	237.6	237.6	237.6	239.3	239.3
50°	175.6	177.4	180.8	180.8	184.2	184.2	186.0	186.0	186.0	186.0	187.7
52.5°	136.0	137.8	141.2	141.2	142.9	144.6	144.6	144.6	144.6	146.4	144.6
55°	103.3	105.0	106.8	106.8	110.2	110.2	110.2	110.2	110.2	110.2	110.2
57.5°	77.5	79.2	80.9	80.9	80.9	82.7	80.9	82.7	82.7	82.7	82.7
60°	56.8	58.5	58.5	58.5	60.3	60.3	60.3	60.3	60.3	60.3	60.3
62.5°	39.6	39.6	41.3	41.3	41.3	43.0	41.3	41.3	43.0	43.0	41.3
65°	27.6	27.6	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3
67.5°	18.9	18.9	18.9	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7
70°	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
72.5°	8.6	8.6	8.6	8.6	10.3	10.3	10.3	10.3	10.3	10.3	10.3
75°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
77.5°	3.4	3.4	5.2	5.2	5.2	3.4	3.4	3.4	5.2	5.2	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 ERW6A15840 6LW111H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	960.8	960.8	960.8	960.8
2.5°	966.0	964.3	966.0	960.8
5°	981.5	979.8	983.2	976.3
7.5°	991.8	990.1	993.5	986.7
10°	993.5	993.5	997.0	990.1
12.5°	993.5	993.5	997.0	990.1
15°	993.5	991.8	995.3	988.4
17.5°	981.5	981.5	984.9	978.1
20°	959.1	959.1	962.6	957.4
22.5°	931.6	931.6	933.3	928.1
25°	897.1	895.4	898.8	895.4
27.5°	854.1	852.4	854.1	850.6
30°	795.5	793.8	797.2	793.8
32.5°	730.1	726.7	730.1	726.7
35°	649.2	645.7	649.2	647.4
37.5°	559.6	556.2	559.6	557.9
40°	464.9	463.2	466.6	464.9
42.5°	378.8	375.4	378.8	377.1
45°	303.1	299.6	303.1	301.3
47.5°	239.3	237.6	241.1	239.3
50°	187.7	186.0	187.7	187.7
52.5°	144.6	142.9	144.6	144.6
55°	110.2	108.5	110.2	110.2
57.5°	82.7	80.9	82.7	82.7
60°	60.3	60.3	60.3	60.3
62.5°	43.0	41.3	43.0	43.0
65°	29.3	29.3	29.3	29.3
67.5°	20.7	20.7	20.7	20.7
70°	13.8	13.8	13.8	13.8
72.5°	10.3	10.3	10.3	8.6
75°	6.9	6.9	6.9	6.9
77.5°	5.2	3.4	5.2	5.2
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)