

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: P226263

Luminaire Tested: **LD2B15D010 EU2B15WW9030 2LBSW***

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P226263
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P14828)
Test Lab: INNOVATION CENTER (G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD2B15D010 EU2B15WW9030 2LBSW*
Description: 1500 Lumen, 2inch Portfolio LED Downlight
WALL WASH OPTIC
WALL WASH LENSED TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 796.3 lumens
Efficiency: N/A
Efficacy: 55.7 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.79 / 1.02
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')
CIE Type: Direct

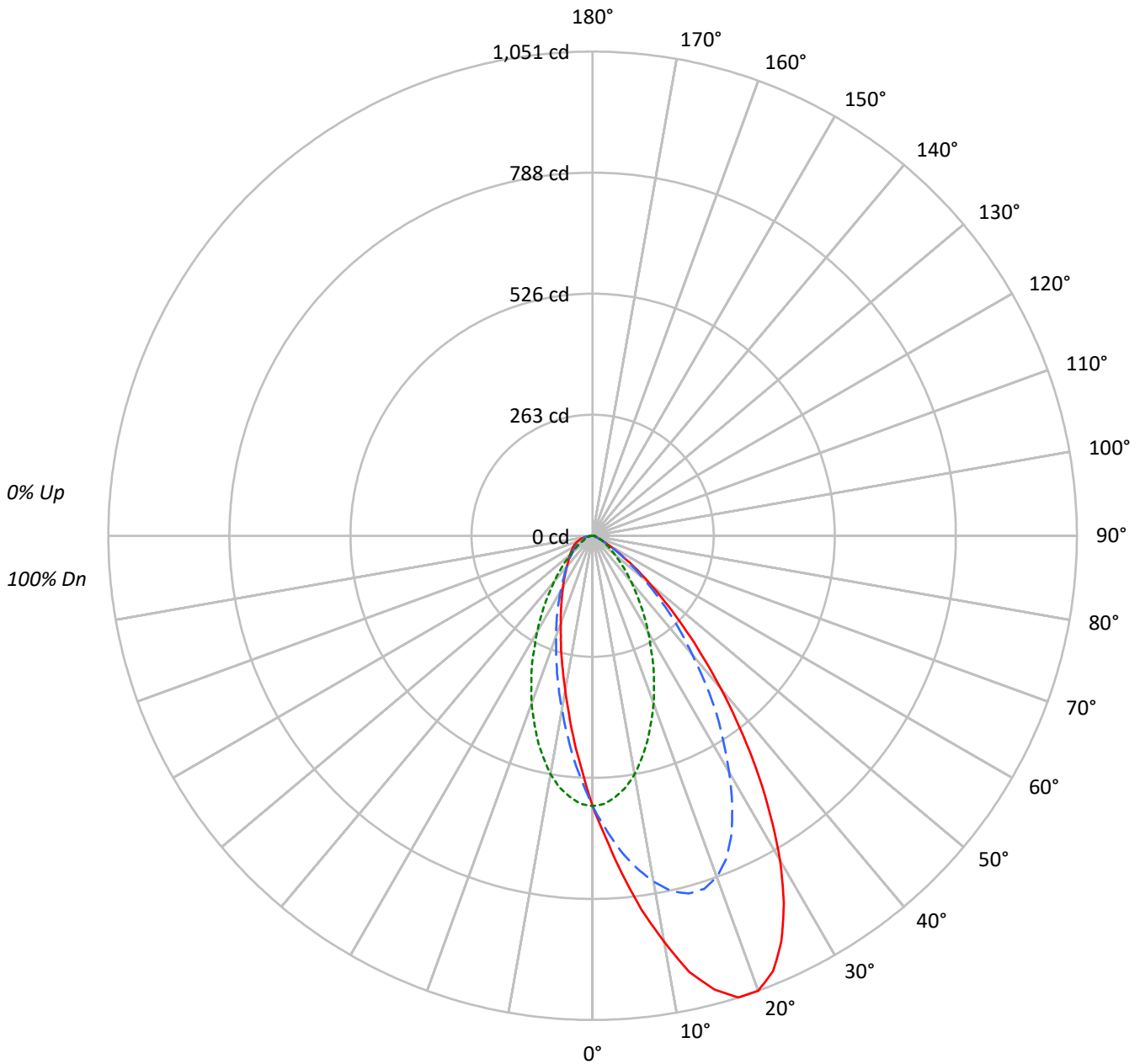
Input Watts (W): 14.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P226263

CATALOG NUMBER: LD2B15D010 EU2B15WW9030 2LBSW*

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	100	100	100
1	112	109	105	103	109	106	104	101	102	100	98	98	97	95	95	94	92	90	90	90	90
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81	81	81	81
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73	73	73	73
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68	66	66	66	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60	60	60	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55	55	55	55
7	76	65	58	53	75	64	58	53	63	57	52	62	56	52	60	56	52	50	50	50	50
8	72	60	53	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46	46	46	46
9	68	56	50	45	66	56	49	45	55	49	45	54	48	44	53	48	44	43	43	43	43
10	64	53	46	42	63	52	46	42	51	46	41	51	45	41	50	45	41	40	40	40	40

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	227256	227256	227256
5°	286487	221203	175127
10°	351944	206651	134398
15°	408750	184545	105345
20°	433186	159606	83059
25°	414525	133388	68382
30°	363987	107792	57429
35°	293269	85021	49509
40°	218742	65936	43940
45°	151464	49794	40043
50°	97622	36879	38085
55°	57334	28026	37345
60°	30600	22931	38270
65°	14481	18147	38036
70°	6682	15629	38053
75°	8830	14816	41456
80°	8923	13161	39705
85°	8889	17777	35110



TEST NUMBER: P226263

CATALOG NUMBER: LD2B15D010 EU2B15WW9030 2LBSW*

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.4	7.0
10°-20°	154.7	19.4
20°-30°	201.8	25.3
30°-40°	174.7	21.9
40°-50°	110.6	13.9
50°-60°	55.4	7.0
60°-70°	25.5	3.2
70°-80°	13.7	1.7
80°-90°	4.4	0.6
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°	412.0	51.7
0°-40°	586.7	73.7
0°-60°	752.7	94.5
0°-90°	796.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	796.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	587	587	587	587	587	
5°	737	685	569	482	450	75
15°	1019	804	460	300	263	287
25°	970	713	312	180	160	439
35°	620	466	180	109	105	385
45°	276	231	91	71	73	218
55°	85	79	42	47	55	81
65°	16	18	20	34	42	18
75°	6	6	10	20	28	5
85°	2	2	4	6	8	2
90°	0	0	0	0	0	



TEST NUMBER: P226263

CATALOG NUMBER: LD2B15D010 EU2B15WW9030 2LBSW*

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	586.7	586.7	586.7	586.7	586.7	586.7	586.7	586.7	586.7	586.7	586.7
2.5°	655.8	659.7	659.7	661.7	653.8	655.8	655.8	651.8	645.9	642.0	636.0
5°	736.8	736.8	734.8	736.8	730.9	726.9	728.9	721.0	705.2	697.3	685.4
7.5°	819.7	815.8	815.8	813.8	803.9	798.0	796.0	782.2	760.5	744.7	726.9
10°	894.8	894.8	890.9	886.9	873.1	865.2	859.3	837.5	813.8	788.1	762.5
12.5°	969.9	965.9	960.0	952.1	932.3	924.4	914.6	888.9	853.3	823.7	790.1
15°	1019.3	1021.2	1011.4	1001.5	979.7	967.9	956.0	924.4	883.0	845.4	803.9
17.5°	1050.9	1048.9	1039.0	1027.2	1003.4	989.6	975.8	938.3	894.8	849.4	803.9
20°	1050.9	1050.9	1039.0	1027.2	1001.5	985.7	971.8	932.3	884.9	837.5	788.1
22.5°	1023.2	1019.3	1011.4	999.5	973.8	960.0	944.2	904.7	855.3	809.9	758.5
25°	969.9	969.9	960.0	946.2	924.4	908.6	894.8	855.3	807.9	762.5	713.1
27.5°	898.8	896.8	886.9	877.0	853.3	841.5	827.6	790.1	748.6	707.2	655.8
30°	813.8	809.9	805.9	790.1	774.3	764.4	752.6	719.0	677.5	638.0	592.6
32.5°	717.0	723.0	713.1	703.2	689.4	679.5	669.6	643.9	606.4	570.9	527.4
35°	620.2	624.2	618.3	610.4	596.5	590.6	580.7	559.0	531.4	497.8	466.2
37.5°	523.5	523.5	523.5	517.5	509.6	503.7	497.8	478.0	454.3	428.6	399.0
40°	432.6	438.5	430.6	428.6	422.7	420.7	414.8	401.0	381.2	363.5	335.8
42.5°	349.6	349.6	351.6	347.7	345.7	341.7	337.8	329.9	316.0	300.2	282.5
45°	276.5	278.5	280.5	274.6	274.6	274.6	272.6	264.7	252.8	243.0	231.1
47.5°	215.3	215.3	217.3	215.3	215.3	215.3	211.4	211.4	203.5	193.6	183.7
50°	162.0	163.9	165.9	165.9	165.9	163.9	163.9	160.0	156.0	152.1	142.2
52.5°	122.5	122.5	120.5	122.5	122.5	122.5	122.5	120.5	118.5	114.6	108.6
55°	84.9	84.9	86.9	86.9	86.9	88.9	88.9	88.9	86.9	84.9	79.0
57.5°	59.3	59.3	59.3	61.2	63.2	63.2	63.2	63.2	61.2	59.3	57.3
60°	39.5	39.5	39.5	41.5	41.5	41.5	41.5	43.5	41.5	41.5	39.5
62.5°	25.7	25.7	25.7	25.7	25.7	27.7	27.7	27.7	27.7	27.7	25.7
65°	15.8	15.8	15.8	15.8	15.8	15.8	17.8	17.8	17.8	17.8	17.8
67.5°	9.9	9.9	9.9	9.9	9.9	11.9	11.9	11.9	11.9	11.9	11.9
70°	5.9	5.9	5.9	5.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
72.5°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
75°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
77.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.9	5.9	5.9
80°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
82.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	4.0	4.0	2.0
85°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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: P226263

CATALOG NUMBER: LD2B15D010 EU2B15WW9030 2LBSW*

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	586.7	586.7	586.7	586.7	586.7	586.7	586.7	586.7	586.7	586.7	586.7
2.5°	636.0	628.1	624.2	614.3	612.3	604.4	604.4	596.5	586.7	582.7	572.8
5°	677.5	661.7	653.8	636.0	630.1	618.3	612.3	596.5	580.7	568.9	555.1
7.5°	713.1	689.4	673.6	649.9	640.0	622.2	610.4	590.6	568.9	551.1	531.4
10°	740.7	709.1	685.4	653.8	642.0	620.2	602.5	574.8	547.2	525.4	501.7
12.5°	758.5	721.0	687.4	649.9	634.1	610.4	584.7	553.1	521.5	493.8	468.1
15°	766.4	721.0	681.5	636.0	618.3	592.6	563.0	525.4	489.9	460.2	432.6
17.5°	760.5	707.2	665.7	614.3	594.6	564.9	531.4	491.8	454.3	422.7	395.1
20°	740.7	685.4	638.0	584.7	563.0	533.3	495.8	456.3	418.8	387.2	357.5
22.5°	707.2	649.9	600.5	547.2	525.4	495.8	456.3	416.8	379.3	347.7	320.0
25°	665.7	604.4	555.1	503.7	480.0	454.3	414.8	375.3	339.8	312.1	284.4
27.5°	610.4	557.0	507.7	456.3	434.6	410.9	371.4	335.8	300.2	272.6	248.9
30°	551.1	499.7	458.3	408.9	389.1	365.4	331.8	296.3	266.7	241.0	219.3
32.5°	491.8	442.5	403.0	361.5	343.7	320.0	290.4	258.8	231.1	209.4	191.6
35°	430.6	389.1	351.6	312.1	298.3	278.5	250.9	223.2	199.5	179.8	162.0
37.5°	369.4	335.8	302.2	270.6	254.8	239.0	213.3	189.6	167.9	152.1	138.3
40°	314.1	284.4	256.8	227.2	213.3	201.5	179.8	160.0	144.2	130.4	118.5
42.5°	260.7	237.0	213.3	189.6	177.8	167.9	150.1	132.3	118.5	108.6	98.8
45°	213.3	195.6	175.8	154.1	148.1	136.3	122.5	110.6	98.8	90.9	83.0
47.5°	171.9	156.0	140.2	124.4	118.5	110.6	98.8	88.9	81.0	75.1	69.1
50°	134.3	122.5	112.6	98.8	94.8	86.9	79.0	71.1	65.2	61.2	57.3
52.5°	102.7	92.8	84.9	77.0	73.1	69.1	61.2	57.3	53.3	51.4	49.4
55°	75.1	69.1	63.2	57.3	55.3	51.4	47.4	43.5	41.5	41.5	41.5
57.5°	53.3	49.4	45.4	41.5	41.5	39.5	37.5	35.6	33.6	33.6	33.6
60°	37.5	35.6	33.6	31.6	29.6	29.6	27.7	29.6	27.7	29.6	29.6
62.5°	25.7	23.7	23.7	21.7	21.7	21.7	21.7	21.7	23.7	23.7	25.7
65°	15.8	15.8	15.8	15.8	15.8	15.8	17.8	17.8	17.8	19.8	19.8
67.5°	11.9	11.9	11.9	13.8	13.8	13.8	13.8	15.8	15.8	15.8	17.8
70°	7.9	9.9	9.9	9.9	9.9	9.9	11.9	11.9	11.9	13.8	13.8
72.5°	7.9	7.9	7.9	7.9	7.9	7.9	9.9	9.9	9.9	11.9	11.9
75°	5.9	7.9	7.9	7.9	7.9	7.9	7.9	9.9	9.9	9.9	11.9
77.5°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	7.9	7.9	7.9	7.9
80°	4.0	4.0	4.0	5.9	5.9	5.9	5.9	5.9	5.9	5.9	7.9
82.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.9
85°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	4.0	2.0	4.0	4.0
87.5°	0.0	0.0	0.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0
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: P226263

CATALOG NUMBER: LD2B15D010 EU2B15WW9030 2LBSW*

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	586.7	586.7	586.7	586.7	586.7	586.7	586.7	586.7	586.7	586.7	586.7
2.5°	568.9	563.0	564.9	553.1	555.1	547.2	543.2	537.3	533.3	527.4	529.4
5°	545.2	535.3	531.4	517.5	519.5	507.7	499.7	489.9	482.0	472.1	470.1
7.5°	515.6	499.7	493.8	480.0	478.0	462.2	452.3	440.5	430.6	420.7	416.8
10°	482.0	464.2	452.3	438.5	436.5	418.8	406.9	395.1	383.2	373.3	369.4
12.5°	446.4	426.7	412.8	397.0	393.1	377.3	363.5	351.6	339.8	329.9	323.9
15°	408.9	387.2	373.3	357.5	353.6	335.8	323.9	310.1	300.2	290.4	286.4
17.5°	371.4	349.6	333.8	320.0	316.0	298.3	284.4	274.6	262.7	256.8	250.9
20°	333.8	312.1	296.3	284.4	278.5	264.7	250.9	241.0	231.1	225.2	219.3
22.5°	296.3	276.5	262.7	250.9	246.9	233.1	221.2	211.4	205.4	197.5	193.6
25°	262.7	243.0	231.1	219.3	215.3	203.5	195.6	185.7	179.8	173.8	169.9
27.5°	231.1	213.3	201.5	191.6	189.6	179.8	169.9	163.9	158.0	154.1	152.1
30°	199.5	185.7	175.8	167.9	165.9	156.0	148.1	144.2	138.3	136.3	134.3
32.5°	175.8	162.0	154.1	146.2	144.2	136.3	132.3	126.4	122.5	120.5	120.5
35°	150.1	140.2	132.3	128.4	126.4	120.5	114.6	112.6	108.6	106.7	106.7
37.5°	128.4	120.5	114.6	108.6	108.6	104.7	100.7	98.8	96.8	96.8	94.8
40°	110.6	102.7	100.7	96.8	94.8	92.8	90.9	88.9	86.9	86.9	86.9
42.5°	92.8	88.9	84.9	83.0	83.0	81.0	79.0	79.0	77.0	79.0	79.0
45°	79.0	75.1	73.1	71.1	73.1	71.1	71.1	69.1	71.1	71.1	71.1
47.5°	67.2	65.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	65.2	65.2
50°	57.3	55.3	55.3	55.3	55.3	55.3	57.3	57.3	57.3	59.3	59.3
52.5°	47.4	47.4	47.4	47.4	49.4	49.4	51.4	51.4	53.3	53.3	55.3
55°	41.5	41.5	41.5	41.5	43.5	43.5	45.4	47.4	47.4	49.4	51.4
57.5°	35.6	35.6	37.5	37.5	39.5	39.5	41.5	43.5	43.5	45.4	47.4
60°	29.6	31.6	33.6	33.6	33.6	35.6	37.5	39.5	39.5	41.5	43.5
62.5°	25.7	27.7	29.6	29.6	29.6	31.6	33.6	35.6	35.6	37.5	39.5
65°	21.7	23.7	25.7	25.7	25.7	27.7	29.6	31.6	33.6	33.6	35.6
67.5°	19.8	19.8	21.7	21.7	23.7	25.7	25.7	27.7	29.6	31.6	33.6
70°	15.8	17.8	19.8	19.8	19.8	21.7	23.7	25.7	25.7	27.7	29.6
72.5°	13.8	13.8	15.8	15.8	17.8	19.8	19.8	21.7	23.7	23.7	25.7
75°	11.9	13.8	13.8	13.8	15.8	15.8	17.8	19.8	19.8	21.7	21.7
77.5°	9.9	9.9	11.9	11.9	11.9	13.8	13.8	15.8	15.8	17.8	17.8
80°	7.9	7.9	9.9	9.9	9.9	9.9	11.9	11.9	13.8	13.8	13.8
82.5°	5.9	5.9	5.9	5.9	7.9	7.9	7.9	7.9	9.9	9.9	9.9
85°	4.0	4.0	4.0	4.0	4.0	5.9	5.9	5.9	5.9	5.9	7.9
87.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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: P226263

CATALOG NUMBER: LD2B15D010 EU2B15WW9030 2LBSW*

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	586.7	586.7	586.7	586.7	586.7	586.7	586.7	586.7
2.5°	523.5	523.5	521.5	519.5	517.5	515.6	513.6	511.6
5°	464.2	466.2	458.3	456.3	456.3	452.3	454.3	450.4
7.5°	408.9	408.9	403.0	401.0	399.0	395.1	393.1	391.1
10°	359.5	357.5	353.6	351.6	347.7	345.7	345.7	341.7
12.5°	316.0	314.1	310.1	308.1	304.2	302.2	300.2	298.3
15°	278.5	276.5	272.6	270.6	268.6	264.7	264.7	262.7
17.5°	243.0	241.0	239.0	235.1	235.1	231.1	229.1	229.1
20°	215.3	213.3	209.4	207.4	207.4	205.4	205.4	201.5
22.5°	189.6	187.7	185.7	183.7	183.7	181.7	179.8	179.8
25°	167.9	165.9	163.9	163.9	162.0	160.0	160.0	160.0
27.5°	148.1	148.1	146.2	146.2	146.2	144.2	144.2	142.2
30°	132.3	132.3	130.4	130.4	130.4	128.4	130.4	128.4
32.5°	118.5	118.5	118.5	118.5	118.5	116.5	116.5	116.5
35°	106.7	106.7	106.7	106.7	106.7	104.7	106.7	104.7
37.5°	94.8	96.8	94.8	94.8	96.8	94.8	94.8	94.8
40°	86.9	86.9	86.9	86.9	86.9	86.9	86.9	86.9
42.5°	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0
45°	71.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1
47.5°	67.2	67.2	67.2	67.2	69.1	67.2	69.1	69.1
50°	61.2	61.2	61.2	63.2	63.2	63.2	63.2	63.2
52.5°	57.3	57.3	57.3	57.3	59.3	59.3	59.3	59.3
55°	51.4	53.3	53.3	53.3	55.3	55.3	55.3	55.3
57.5°	49.4	49.4	49.4	51.4	51.4	51.4	53.3	51.4
60°	45.4	45.4	47.4	47.4	47.4	49.4	49.4	49.4
62.5°	41.5	43.5	43.5	43.5	43.5	45.4	45.4	45.4
65°	37.5	39.5	39.5	39.5	41.5	41.5	41.5	41.5
67.5°	33.6	35.6	35.6	37.5	37.5	37.5	37.5	37.5
70°	29.6	31.6	31.6	31.6	33.6	33.6	33.6	33.6
72.5°	27.7	27.7	27.7	29.6	29.6	29.6	31.6	29.6
75°	23.7	25.7	25.7	25.7	25.7	25.7	27.7	27.7
77.5°	19.8	19.8	19.8	19.8	21.7	21.7	21.7	21.7
80°	15.8	15.8	15.8	15.8	17.8	17.8	17.8	17.8
82.5°	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9
85°	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
87.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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













(END OF REPORT)