

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: P136365

Luminaire Tested: **LD6A10D010TE ERW6A10930 6LW111H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136365
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: LD6A10D010TE ERW6A10930 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 3000K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1032.8 lumens
Efficiency: N/A
Efficacy: 73.8 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

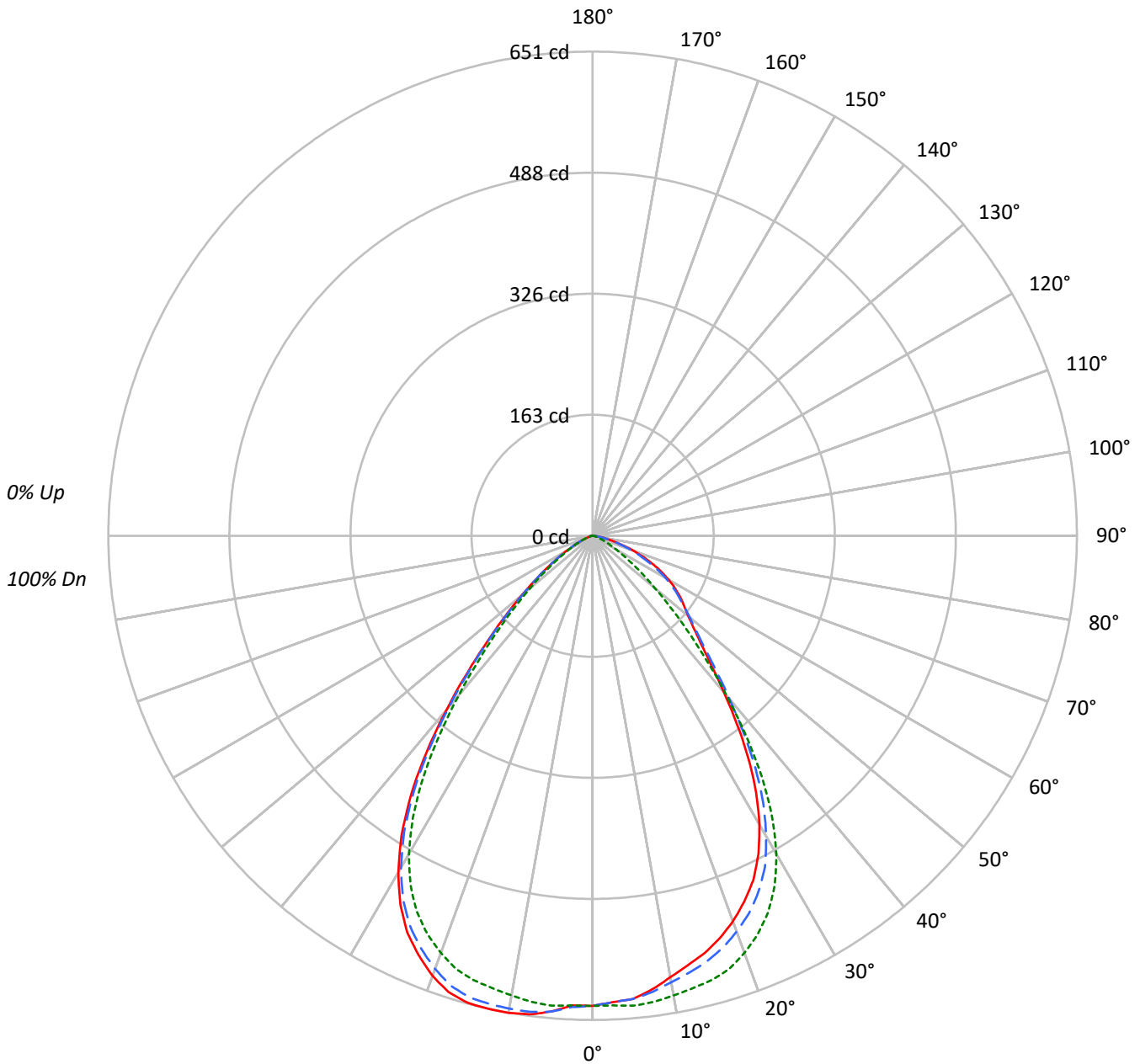
Input Watts (W): 14
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	41232	41232	41232
5°	40944	41540	42058
10°	39920	41570	43147
15°	39249	41775	43909
20°	38296	41441	43719
25°	36777	40196	42399
30°	33787	37207	39339
35°	29046	31666	33920
40°	23344	23829	26044
45°	19025	16506	18287
50°	17011	11043	12535
55°	16368	7211	8246
60°	15371	4580	5180
65°	13631	2794	2979
70°	11006	1736	1736
75°	7713	1134	1134
80°	5110	864	864
85°	2545	823	823



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.2	5.8
10°-20°	173.5	16.8
20°-30°	252.7	24.5
30°-40°	245.1	23.7
40°-50°	154.9	15.0
50°-60°	86.3	8.4
60°-70°	42.7	4.1
70°-80°	15.1	1.5
80°-90°	2.4	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°	486.3	47.1
0°-40°	731.4	70.8
0°-60°	972.6	94.2
0°-90°	1032.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1032.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	632	632	632	632	632	
5°	625	625	634	642	642	59
15°	581	592	618	642	650	163
25°	511	528	558	580	589	233
35°	365	382	398	419	426	226
45°	206	212	179	196	198	163
55°	144	140	63	72	72	128
65°	88	82	18	19	19	87
75°	31	28	4	4	4	34
85°	3	3	1	1	1	5
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°	632.0	632.0	632.0	632.0	632.0	632.0	632.0	632.0	632.0	632.0	632.0
2.5°	627.5	621.9	624.1	623.0	624.1	623.0	626.4	623.0	625.2	627.5	623.0
5°	625.2	619.6	620.8	620.8	620.8	620.8	624.1	620.8	623.0	625.2	621.9
7.5°	615.1	610.6	611.7	611.7	611.7	611.7	615.1	612.8	615.1	618.5	615.1
10°	602.6	598.1	600.3	600.3	600.3	600.3	604.9	602.6	604.9	609.4	606.0
12.5°	591.3	587.9	590.1	590.1	590.1	591.3	594.7	593.5	595.8	601.5	598.1
15°	581.1	577.7	579.9	579.9	579.9	581.1	584.5	585.6	587.9	592.4	590.1
17.5°	567.5	564.1	567.5	567.5	566.3	568.6	573.1	573.1	575.4	581.1	579.9
20°	551.6	548.2	551.6	551.6	550.5	552.7	557.3	558.4	560.7	566.3	565.2
22.5°	532.3	531.2	532.3	534.6	533.4	534.6	539.1	540.3	542.5	549.3	548.2
25°	510.9	509.7	512.0	513.1	512.0	513.1	517.7	518.8	521.1	527.8	527.8
27.5°	482.5	481.4	484.8	484.8	484.8	487.1	490.5	492.7	493.9	501.8	500.7
30°	448.5	447.4	449.6	450.8	450.8	450.8	455.3	458.7	459.8	466.7	466.7
32.5°	408.9	408.9	410.1	412.3	411.2	413.5	416.9	419.1	421.4	427.1	427.1
35°	364.7	365.8	367.0	369.2	368.1	369.2	372.6	374.9	376.0	381.7	380.6
37.5°	318.3	319.4	320.6	321.7	321.7	322.8	326.3	327.4	328.5	333.1	330.8
40°	274.1	274.1	275.2	277.5	276.4	278.6	280.9	282.0	282.0	285.4	283.2
42.5°	235.6	236.8	237.9	239.0	239.0	240.1	242.4	243.5	243.5	244.6	241.3
45°	206.2	207.3	207.3	209.6	209.6	210.7	211.8	213.0	211.8	211.8	208.4
47.5°	184.6	185.8	186.9	188.0	188.0	189.2	190.3	190.3	189.2	188.0	183.5
50°	167.6	169.9	169.9	171.0	172.1	173.3	173.3	173.3	171.0	169.9	163.1
52.5°	155.1	156.3	157.4	158.5	158.5	159.7	160.8	159.7	157.4	154.0	147.2
55°	143.9	145.0	146.1	147.2	147.2	147.2	147.2	146.1	143.9	140.5	133.7
57.5°	131.4	132.6	133.7	134.8	134.8	134.8	134.8	133.7	131.4	126.9	119.0
60°	117.8	119.0	120.1	121.2	121.2	121.2	120.1	119.0	116.7	113.3	105.3
62.5°	103.1	104.2	105.3	105.3	105.3	104.2	104.2	103.1	100.8	97.4	89.5
65°	88.3	88.3	89.5	89.5	89.5	89.5	88.3	87.2	84.9	81.5	75.9
67.5°	72.5	73.6	73.6	73.6	73.6	73.6	72.5	72.5	70.2	66.8	62.3
70°	57.7	57.7	58.9	58.9	58.9	58.9	57.7	57.7	55.5	53.2	48.7
72.5°	43.1	43.1	43.1	44.2	44.2	44.2	43.1	43.1	42.0	39.7	36.3
75°	30.6	30.6	30.6	31.7	31.7	31.7	31.7	30.6	29.5	28.3	26.1
77.5°	20.4	21.5	20.4	20.4	20.4	21.5	20.4	20.4	20.4	19.3	17.0
80°	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	12.5	12.5	11.3
82.5°	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	6.8	6.8
85°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	632.0	632.0	632.0	632.0	632.0	632.0	632.0	632.0	632.0	632.0	632.0
2.5°	626.4	628.6	630.9	628.6	625.2	632.0	630.9	632.0	630.9	628.6	635.4
5°	625.2	627.5	630.9	628.6	626.4	633.1	632.0	634.3	634.3	632.0	638.8
7.5°	618.5	620.8	626.4	624.1	621.9	628.6	629.7	632.0	633.1	630.9	638.8
10°	610.6	612.8	618.5	617.4	616.2	624.1	625.2	627.5	628.6	627.5	635.4
12.5°	602.6	606.0	611.7	610.6	610.6	618.5	619.6	623.0	625.2	624.1	633.1
15°	594.7	599.2	606.0	604.9	604.9	614.0	615.1	618.5	620.8	620.8	629.7
17.5°	584.5	589.0	595.8	594.7	596.9	603.7	606.0	610.6	612.8	611.7	621.9
20°	569.7	575.4	582.2	581.1	582.2	591.3	593.5	596.9	599.2	599.2	608.3
22.5°	552.7	558.4	565.2	564.1	566.3	573.1	575.4	579.9	582.2	581.1	590.1
25°	532.3	538.0	543.7	543.7	544.8	552.7	555.0	558.4	561.8	560.7	568.6
27.5°	505.2	510.9	516.5	515.4	516.5	524.5	526.7	530.1	533.4	532.3	540.3
30°	470.1	475.7	480.3	479.1	480.3	488.2	489.3	493.9	497.3	497.3	504.1
32.5°	429.3	434.9	437.2	434.9	437.2	442.8	445.1	449.6	451.9	453.0	459.8
35°	382.8	386.2	387.4	385.1	385.1	390.8	393.0	397.6	399.9	401.0	406.7
37.5°	331.9	334.2	331.9	328.5	329.7	331.9	335.3	338.7	342.0	343.2	348.8
40°	282.0	280.9	277.5	271.8	270.7	274.1	276.4	279.8	282.0	284.3	287.7
42.5°	237.9	235.6	228.8	222.0	220.9	220.9	222.0	225.4	227.7	228.8	233.4
45°	202.8	198.2	188.0	180.1	175.5	176.7	176.7	178.9	180.1	182.4	185.8
47.5°	175.5	167.6	155.1	145.0	140.5	139.4	139.4	140.5	141.6	143.9	146.1
50°	154.0	143.9	129.2	117.8	112.2	109.9	109.9	108.8	111.0	112.2	114.4
52.5°	137.1	124.6	107.6	95.1	88.3	86.1	84.9	84.9	84.9	86.1	88.3
55°	121.2	107.6	89.5	77.0	69.1	66.8	64.5	63.4	64.5	65.7	66.8
57.5°	107.6	92.9	74.7	61.1	54.3	50.9	48.7	47.6	47.6	48.7	49.8
60°	94.0	79.3	61.1	48.7	42.0	38.6	36.3	35.1	35.1	36.3	36.3
62.5°	79.3	65.7	49.8	38.6	31.7	28.3	26.1	26.1	24.9	24.9	26.1
65°	66.8	54.3	40.8	30.6	23.8	21.5	19.3	18.1	18.1	17.0	18.1
67.5°	54.3	44.2	32.9	23.8	18.1	15.9	13.6	13.6	12.5	12.5	12.5
70°	43.1	35.1	26.1	18.1	14.7	11.3	10.2	9.1	9.1	9.1	9.1
72.5°	31.7	26.1	19.3	13.6	10.2	9.1	7.9	6.8	5.7	5.7	5.7
75°	22.7	18.1	13.6	10.2	7.9	6.8	5.7	4.5	4.5	4.5	4.5
77.5°	15.9	12.5	10.2	6.8	5.7	4.5	3.4	3.4	3.4	3.4	2.3
80°	10.2	7.9	6.8	4.5	3.4	3.4	2.3	2.3	2.3	2.3	2.3
82.5°	5.7	4.5	3.4	3.4	2.3	2.3	1.1	1.1	1.1	1.1	1.1
85°	2.3	2.3	2.3	1.1	1.1	1.1	1.1	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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	632.0	632.0	632.0	632.0	632.0	632.0	632.0	632.0	632.0	632.0	632.0
2.5°	628.6	633.1	633.1	635.4	632.0	634.3	637.7	636.5	633.1	634.3	635.4
5°	633.1	637.7	638.8	642.2	638.8	642.2	646.7	645.6	642.2	644.5	645.6
7.5°	633.1	638.8	641.1	644.5	642.2	645.6	651.3	650.1	646.7	649.0	651.3
10°	630.9	636.5	639.9	643.3	641.1	645.6	650.1	650.1	647.9	650.1	653.5
12.5°	628.6	634.3	637.7	641.1	638.8	644.5	650.1	649.0	647.9	650.1	653.5
15°	625.2	630.9	634.3	637.7	636.5	642.2	647.9	647.9	645.6	649.0	652.4
17.5°	617.4	623.0	627.5	629.7	628.6	634.3	639.9	639.9	637.7	641.1	644.5
20°	603.7	609.4	614.0	616.2	615.1	619.6	625.2	626.4	624.1	627.5	630.9
22.5°	586.7	591.3	595.8	598.1	596.9	601.5	607.1	608.3	606.0	609.4	611.7
25°	566.3	569.7	574.3	576.5	575.4	579.9	585.6	585.6	584.5	586.7	589.0
27.5°	538.0	542.5	545.9	548.2	548.2	551.6	556.1	557.3	556.1	558.4	561.8
30°	502.9	505.2	509.7	510.9	512.0	515.4	519.9	519.9	518.8	521.1	524.5
32.5°	458.7	462.1	465.5	466.7	467.8	471.2	474.6	475.7	474.6	476.9	480.3
35°	406.7	410.1	413.5	414.6	415.7	419.1	422.5	423.7	422.5	424.8	428.2
37.5°	348.8	351.1	354.5	355.6	357.9	360.2	362.4	364.7	363.6	365.8	368.1
40°	290.0	291.1	294.5	295.6	297.9	300.2	302.4	303.6	303.6	304.7	305.8
42.5°	234.5	236.8	239.0	240.1	242.4	243.5	245.7	246.9	246.9	248.0	249.1
45°	186.9	189.2	191.4	192.6	194.8	196.0	197.1	198.2	197.1	197.1	199.4
47.5°	147.2	149.5	151.7	152.9	154.0	155.1	156.3	156.3	156.3	157.4	157.4
50°	115.6	116.7	119.0	119.0	121.2	121.2	122.4	122.4	122.4	122.4	123.5
52.5°	89.5	90.6	92.9	92.9	94.0	95.1	95.1	95.1	95.1	96.3	95.1
55°	67.9	69.1	70.2	70.2	72.5	72.5	72.5	72.5	72.5	72.5	72.5
57.5°	50.9	52.1	53.2	53.2	53.2	54.3	53.2	54.3	54.3	54.3	54.3
60°	37.4	38.6	38.6	38.6	39.7	39.7	39.7	39.7	39.7	39.7	39.7
62.5°	26.1	26.1	27.2	27.2	27.2	28.3	27.2	27.2	28.3	28.3	27.2
65°	18.1	18.1	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3
67.5°	12.5	12.5	12.5	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6
70°	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1
72.5°	5.7	5.7	5.7	5.7	6.8	6.8	6.8	6.8	6.8	6.8	6.8
75°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
77.5°	2.3	2.3	3.4	3.4	3.4	2.3	2.3	2.3	3.4	3.4	2.3
80°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
82.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
85°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.0	1.1	1.1	1.1
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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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	632.0	632.0	632.0	632.0
2.5°	635.4	634.3	635.4	632.0
5°	645.6	644.5	646.7	642.2
7.5°	652.4	651.3	653.5	649.0
10°	653.5	653.5	655.8	651.3
12.5°	653.5	653.5	655.8	651.3
15°	653.5	652.4	654.7	650.1
17.5°	645.6	645.6	647.9	643.3
20°	630.9	630.9	633.1	629.7
22.5°	612.8	612.8	614.0	610.6
25°	590.1	589.0	591.3	589.0
27.5°	561.8	560.7	561.8	559.5
30°	523.3	522.2	524.5	522.2
32.5°	480.3	478.0	480.3	478.0
35°	427.1	424.8	427.1	425.9
37.5°	368.1	365.8	368.1	367.0
40°	305.8	304.7	307.0	305.8
42.5°	249.1	246.9	249.1	248.0
45°	199.4	197.1	199.4	198.2
47.5°	157.4	156.3	158.5	157.4
50°	123.5	122.4	123.5	123.5
52.5°	95.1	94.0	95.1	95.1
55°	72.5	71.3	72.5	72.5
57.5°	54.3	53.2	54.3	54.3
60°	39.7	39.7	39.7	39.7
62.5°	28.3	27.2	28.3	28.3
65°	19.3	19.3	19.3	19.3
67.5°	13.6	13.6	13.6	13.6
70°	9.1	9.1	9.1	9.1
72.5°	6.8	6.8	6.8	5.7
75°	4.5	4.5	4.5	4.5
77.5°	3.4	2.3	3.4	3.4
80°	2.3	2.3	2.3	2.3
82.5°	1.1	1.1	1.1	1.1
85°	1.1	1.1	1.1	1.1
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)