

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: P136485

Luminaire Tested: **LD6A10D010TE ERW6A10930 6LW121LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136485
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: LD6A10D010TE ERW6A10930 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 3000K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1098.9 lumens
Efficiency: N/A
Efficacy: 78.5 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

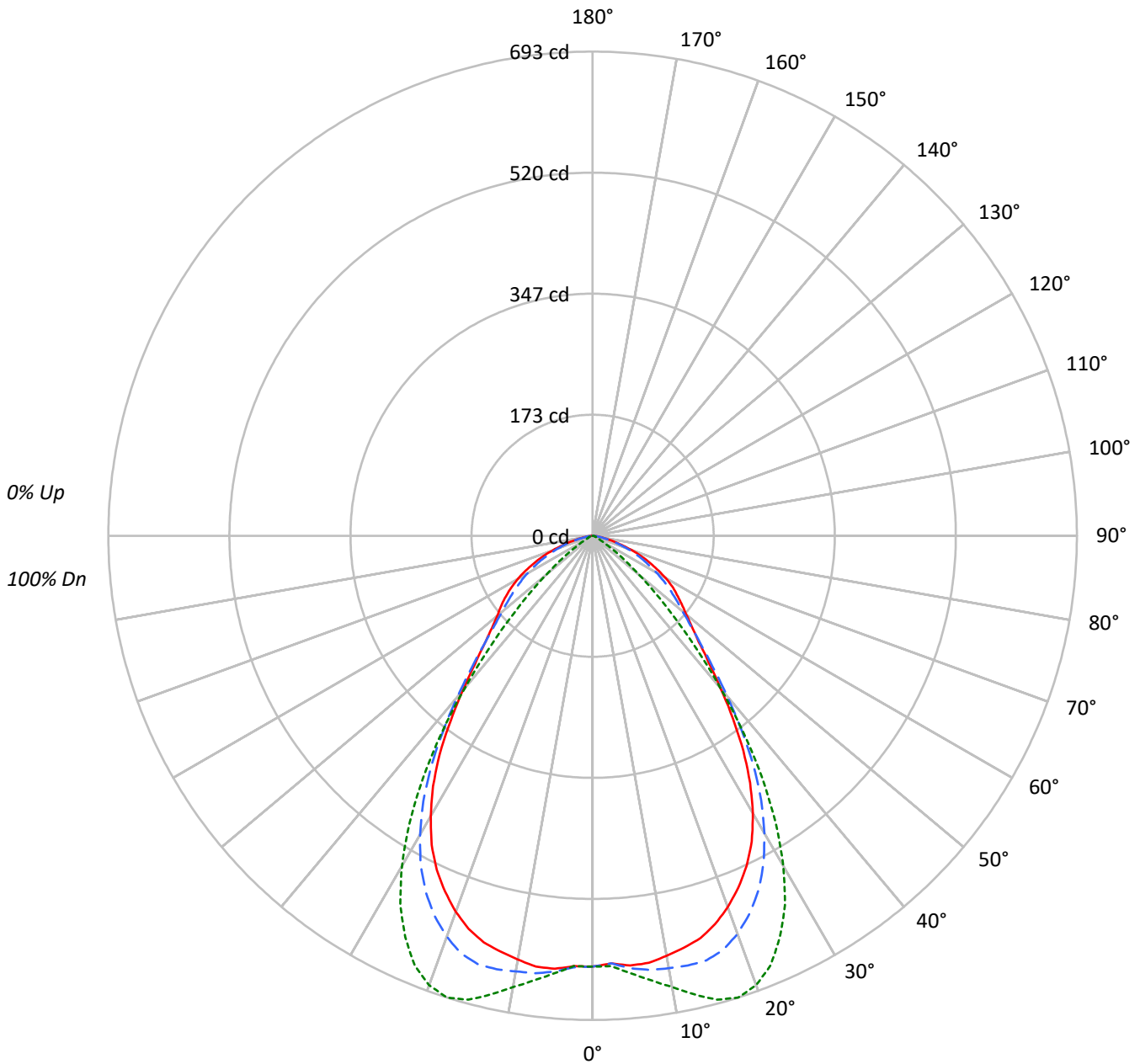
Input Watts (W): 14
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	40227	40227	40227
5°	40433	41160	40741
10°	40437	43451	40802
15°	40262	46428	40694
20°	39261	47509	39754
25°	37533	45639	37994
30°	34540	41117	34894
35°	29938	33697	30376
40°	24255	24255	24579
45°	19809	15380	20178
50°	17721	8779	18036
55°	16732	4470	17266
60°	15697	1957	16114
65°	13724	1096	14202
70°	11102	897	11560
75°	7739	605	7940
80°	4734	301	4734
85°	2321	599	2321



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.0	5.5
10°-20°	179.7	16.4
20°-30°	261.5	23.8
30°-40°	248.5	22.6
40°-50°	161.0	14.7
50°-60°	101.0	9.2
60°-70°	60.4	5.5
70°-80°	23.6	2.1
80°-90°	3.2	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°	501.2	45.6
0°-40°	749.7	68.2
0°-60°	1011.7	92.1
0°-90°	1098.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1098.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	617	617	617	617	617	
5°	617	621	628	626	622	59
15°	596	629	687	635	602	167
25°	521	561	634	564	528	238
35°	376	401	423	403	381	233
45°	215	218	167	219	219	170
55°	147	135	39	137	152	132
65°	89	78	7	79	92	88
75°	31	27	2	28	32	34
85°	3	3	1	3	3	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°	616.6	616.6	616.6	616.6	616.6	616.6	616.6	616.6	616.6	616.6	616.6
2.5°	612.7	608.7	619.7	613.5	614.2	622.1	615.9	613.5	621.3	612.7	616.6
5°	617.4	614.2	625.2	619.7	620.6	628.5	623.0	620.6	629.2	621.3	625.2
7.5°	616.6	614.2	624.5	619.7	620.6	630.0	624.5	623.7	634.0	626.8	632.3
10°	610.4	607.2	618.2	614.2	615.9	626.1	621.3	621.3	633.1	628.5	636.3
12.5°	604.0	600.9	611.9	608.7	610.4	621.3	618.2	619.7	633.1	630.0	640.2
15°	596.1	593.0	604.9	601.7	603.2	615.1	613.5	615.1	630.0	629.2	641.0
17.5°	582.8	581.3	591.5	589.9	591.5	603.2	602.5	604.9	621.3	621.3	636.3
20°	565.5	563.1	574.1	572.6	573.4	585.1	585.1	587.5	604.9	606.4	621.3
22.5°	545.0	543.5	554.5	552.2	553.7	564.8	564.8	567.0	583.6	586.0	601.7
25°	521.4	519.9	530.1	529.3	530.1	541.2	540.3	543.5	559.2	560.8	575.8
27.5°	493.1	490.8	501.0	501.0	501.8	512.1	512.1	513.6	527.8	529.3	543.5
30°	458.5	456.2	465.6	466.4	466.4	476.6	476.6	477.5	490.8	491.6	504.2
32.5°	419.3	419.3	426.3	427.1	427.1	436.5	437.3	437.3	449.1	449.1	459.4
35°	375.9	376.7	382.3	383.0	383.8	392.4	392.4	391.7	401.9	401.2	409.8
37.5°	329.6	329.6	335.1	335.8	335.8	343.7	343.7	343.0	351.6	349.2	355.5
40°	284.8	284.8	289.4	291.0	290.2	296.5	296.5	295.7	302.0	298.9	302.0
42.5°	245.4	246.9	250.2	250.9	250.2	255.7	254.8	254.0	258.8	254.0	254.8
45°	214.7	216.3	218.7	219.4	218.7	222.6	221.8	220.2	222.6	217.8	215.5
47.5°	192.0	192.7	196.6	195.8	195.1	198.2	198.2	195.1	195.8	189.6	184.8
50°	174.6	175.4	178.6	178.6	177.0	180.1	178.6	175.4	174.6	167.5	160.5
52.5°	160.5	161.2	164.4	164.4	162.9	165.1	163.6	158.9	158.1	151.0	142.4
55°	147.1	147.9	151.0	151.0	149.5	151.0	148.6	144.7	143.1	135.3	125.9
57.5°	135.3	134.5	136.9	136.9	135.3	136.0	134.5	130.5	127.4	120.3	110.9
60°	120.3	119.5	121.1	121.1	119.5	120.3	118.8	114.0	112.5	105.4	95.9
62.5°	103.8	103.8	105.4	105.4	103.8	103.8	103.0	98.3	96.8	90.4	82.6
65°	88.9	88.9	90.4	90.4	88.9	89.7	88.1	84.9	83.4	77.8	70.8
67.5°	73.9	73.9	74.7	74.7	73.9	73.9	73.2	70.8	68.4	64.5	58.2
70°	58.2	58.2	59.0	59.0	58.2	58.2	58.2	55.8	55.1	51.1	46.4
72.5°	43.2	43.2	44.1	44.1	44.1	44.8	44.1	42.5	40.9	38.6	34.6
75°	30.7	30.7	30.7	31.5	30.7	30.7	31.5	29.9	29.1	26.7	24.4
77.5°	20.5	20.5	20.5	20.5	20.5	21.2	20.5	20.5	19.6	18.1	16.5
80°	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	11.8	11.8	10.2
82.5°	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	6.3	5.5
85°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	2.4
87.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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°	616.6	616.6	616.6	616.6	616.6	616.6	616.6	616.6	616.6	616.6	616.6
2.5°	615.9	616.6	616.6	619.0	621.3	615.1	618.2	616.6	615.1	621.3	617.4
5°	626.1	626.8	626.8	630.0	633.1	626.1	629.2	628.5	626.8	632.3	628.5
7.5°	634.0	636.3	637.8	641.8	645.7	639.5	643.3	641.8	641.0	646.5	641.0
10°	639.5	644.2	646.5	652.8	658.3	652.1	657.6	655.9	655.2	659.9	653.6
12.5°	645.7	652.1	658.3	665.4	673.3	667.8	674.8	672.4	672.4	676.4	668.6
15°	649.7	657.6	666.2	676.4	685.8	681.9	689.8	687.4	687.4	690.5	681.9
17.5°	645.7	655.9	666.2	677.9	689.0	686.7	695.3	692.9	692.2	695.3	685.0
20°	632.3	644.2	655.9	667.8	680.3	678.8	688.2	684.3	685.0	686.7	676.4
22.5°	611.1	623.7	635.5	648.1	659.9	659.1	667.8	665.4	664.6	666.9	655.9
25°	586.0	597.0	608.0	619.0	630.8	629.2	637.8	634.0	634.7	635.5	626.1
27.5°	552.2	562.4	571.0	580.5	591.5	589.1	597.7	596.1	593.9	594.6	586.8
30°	510.4	519.1	525.4	533.3	541.9	539.5	547.4	545.8	544.3	544.3	539.5
32.5°	463.2	469.6	473.5	479.0	485.3	483.0	489.2	487.6	486.1	486.1	483.0
35°	410.5	414.5	414.5	417.6	422.4	418.4	423.9	423.1	420.8	421.5	420.8
37.5°	353.2	354.7	351.6	351.6	354.7	349.2	353.9	353.9	351.6	352.3	352.3
40°	297.3	296.5	290.2	287.1	287.1	281.6	285.5	284.8	283.1	283.9	285.5
42.5°	247.8	243.0	234.4	228.1	226.6	220.2	222.6	221.8	220.2	221.8	224.2
45°	206.1	197.4	185.6	177.0	173.0	166.7	167.5	166.7	166.0	167.5	171.5
47.5°	173.0	161.2	146.3	135.3	129.8	122.7	122.7	121.9	121.9	125.9	128.2
50°	147.1	132.9	115.6	103.0	95.2	88.9	87.3	86.5	87.3	90.4	95.2
52.5°	127.4	110.1	91.2	77.8	69.2	62.1	60.6	59.8	60.6	63.7	68.4
55°	110.1	92.0	72.3	57.4	48.0	41.7	39.3	39.3	39.3	43.2	48.0
57.5°	94.4	76.3	56.6	41.7	33.0	26.7	24.4	23.6	25.2	27.5	32.2
60°	81.0	63.7	44.8	31.5	22.8	17.3	15.0	15.0	15.0	18.1	22.8
62.5°	69.2	53.5	36.2	23.6	16.5	11.8	9.5	9.5	10.2	11.8	16.5
65°	59.0	45.6	30.7	20.5	13.4	9.5	7.9	7.1	7.9	9.5	13.4
67.5°	48.7	37.7	26.0	17.3	11.8	7.9	7.1	6.3	6.3	8.6	11.0
70°	38.6	29.9	21.2	14.1	9.5	6.3	5.5	4.7	5.5	7.1	9.5
72.5°	29.1	22.8	15.7	11.0	7.1	5.5	3.9	3.9	3.9	5.5	7.1
75°	20.5	16.5	11.8	7.9	4.7	3.1	3.1	2.4	3.1	3.9	4.7
77.5°	13.4	11.0	7.9	4.7	3.1	2.4	1.6	1.6	1.6	2.4	3.1
80°	8.6	7.1	4.7	3.1	2.4	1.6	0.8	0.8	0.8	1.6	1.6
82.5°	4.7	3.9	2.4	1.6	1.6	0.8	0.8	0.8	0.8	0.8	0.8
85°	2.4	1.6	1.6	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8
87.5°	0.8	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°	616.6	616.6	616.6	616.6	616.6	616.6	616.6	616.6	616.6	616.6	616.6
2.5°	618.2	615.9	619.0	621.3	620.6	618.2	622.1	615.9	618.2	615.9	611.9
5°	629.2	626.8	629.2	630.8	630.0	626.1	629.2	623.7	625.2	622.1	618.2
7.5°	641.0	637.8	638.7	639.5	637.1	631.6	634.0	626.8	627.6	623.7	619.0
10°	652.1	647.3	646.5	645.0	640.2	633.1	634.0	625.2	624.5	619.0	613.5
12.5°	666.2	658.3	655.2	652.1	645.0	635.5	634.0	623.7	622.1	615.9	609.6
15°	676.4	667.8	662.2	655.9	646.5	634.7	631.6	619.7	616.6	609.6	603.2
17.5°	678.8	667.8	659.9	652.1	641.0	626.8	622.1	609.6	605.6	597.7	591.5
20°	668.6	656.7	648.1	637.8	626.8	610.4	605.6	592.2	587.5	580.5	574.1
22.5°	648.8	635.5	626.8	616.6	605.6	589.9	584.4	571.8	567.0	560.0	553.7
25°	620.6	608.0	599.4	589.9	579.6	563.9	559.2	547.4	543.5	536.4	530.1
27.5°	581.3	569.4	564.8	555.3	545.8	532.4	527.8	517.6	513.6	508.8	501.8
30°	534.0	523.8	521.4	512.8	505.7	494.0	490.0	481.3	477.5	473.5	467.2
32.5°	479.7	471.9	471.9	464.9	460.1	450.6	447.5	440.5	437.3	434.1	428.6
35°	418.4	412.9	416.0	411.4	409.0	402.7	400.3	394.8	392.4	390.2	384.6
37.5°	353.2	349.2	355.5	356.3	356.3	350.8	349.2	346.1	344.5	342.1	337.5
40°	288.6	287.9	297.3	298.9	303.6	300.5	301.2	298.9	297.3	295.7	292.6
42.5°	228.9	232.0	243.8	250.9	255.7	255.7	258.0	257.2	256.4	254.8	252.4
45°	177.7	184.1	198.2	206.8	216.3	218.7	222.6	222.6	223.3	222.6	220.2
47.5°	136.0	145.5	162.0	175.4	185.6	190.3	195.8	197.4	198.2	198.2	196.6
50°	103.0	114.8	133.8	148.6	162.9	169.1	175.4	177.7	180.9	180.1	178.6
52.5°	77.8	91.2	111.7	129.8	144.7	151.8	158.9	162.0	165.1	165.1	164.4
55°	57.4	71.6	93.6	112.5	128.2	136.9	143.9	147.1	151.0	151.8	151.0
57.5°	41.7	55.8	77.1	97.5	112.5	121.9	129.0	132.1	136.0	136.9	136.9
60°	30.7	44.8	65.3	84.2	98.3	107.8	113.3	117.2	120.3	121.9	121.9
62.5°	23.6	36.2	55.1	72.3	84.9	92.8	98.3	101.4	104.7	105.4	106.2
65°	19.6	30.7	46.4	61.3	72.3	79.4	84.2	87.3	89.7	90.4	90.4
67.5°	16.5	26.0	38.6	50.3	59.8	65.3	69.2	71.6	73.9	74.7	74.7
70°	13.4	20.5	30.7	40.1	47.2	51.9	55.1	57.4	59.0	59.0	59.0
72.5°	10.2	15.7	22.8	29.9	35.4	39.3	41.7	42.5	44.1	44.1	44.1
75°	7.1	11.0	16.5	21.2	24.4	27.5	29.1	29.9	30.7	31.5	30.7
77.5°	4.7	7.1	10.2	13.4	16.5	18.1	18.9	19.6	20.5	20.5	20.5
80°	3.1	4.7	6.3	8.6	10.2	11.0	11.8	11.8	12.6	12.6	12.6
82.5°	1.6	2.4	3.9	4.7	5.5	6.3	6.3	6.3	7.1	7.1	6.3
85°	0.8	0.8	1.6	2.4	2.4	3.1	3.1	3.1	3.1	3.1	3.1
87.5°	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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: LD6A10D010TE ERW6A10930 6LW121LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	616.6	616.6	616.6	616.6
2.5°	613.5	615.1	608.7	616.6
5°	619.0	620.6	614.2	622.1
7.5°	619.7	620.6	614.2	622.1
10°	614.2	614.2	608.0	615.9
12.5°	609.6	608.7	601.7	609.6
15°	602.5	601.7	594.6	602.5
17.5°	590.6	589.9	582.8	589.9
20°	572.6	571.8	565.5	572.6
22.5°	552.9	551.4	545.0	551.4
25°	530.1	528.6	522.3	527.8
27.5°	501.0	499.5	493.1	498.7
30°	466.4	464.0	459.4	463.2
32.5°	427.1	425.5	420.0	424.8
35°	383.8	381.4	377.6	381.4
37.5°	336.6	335.1	331.1	333.5
40°	291.0	290.2	287.1	288.6
42.5°	251.7	250.2	247.8	249.3
45°	220.2	219.4	217.1	218.7
47.5°	196.6	195.8	193.5	195.1
50°	179.3	178.6	177.0	177.7
52.5°	165.1	164.4	162.9	165.1
55°	152.6	151.8	149.5	151.8
57.5°	138.4	137.6	135.3	138.4
60°	122.7	122.7	120.3	123.5
62.5°	106.9	106.9	105.4	107.8
65°	92.0	91.2	90.4	92.0
67.5°	75.6	74.7	74.7	76.3
70°	59.8	59.0	59.0	60.6
72.5°	44.8	44.1	44.1	44.8
75°	31.5	30.7	30.7	31.5
77.5°	20.5	20.5	20.5	20.5
80°	12.6	12.6	12.6	12.6
82.5°	7.1	7.1	6.3	7.1
85°	3.1	3.1	3.1	3.1
87.5°	0.8	0.8	0.8	0.8
90°	0.0	0.0	0.0	0.0



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













(END OF REPORT)