

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: P136362

Luminaire Tested: **LD6A10D010TE ERW6A10835 6LW111H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136362
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 ERW6A10835 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 3500K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1154.0 lumens
Efficiency: N/A
Efficacy: 82.4 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

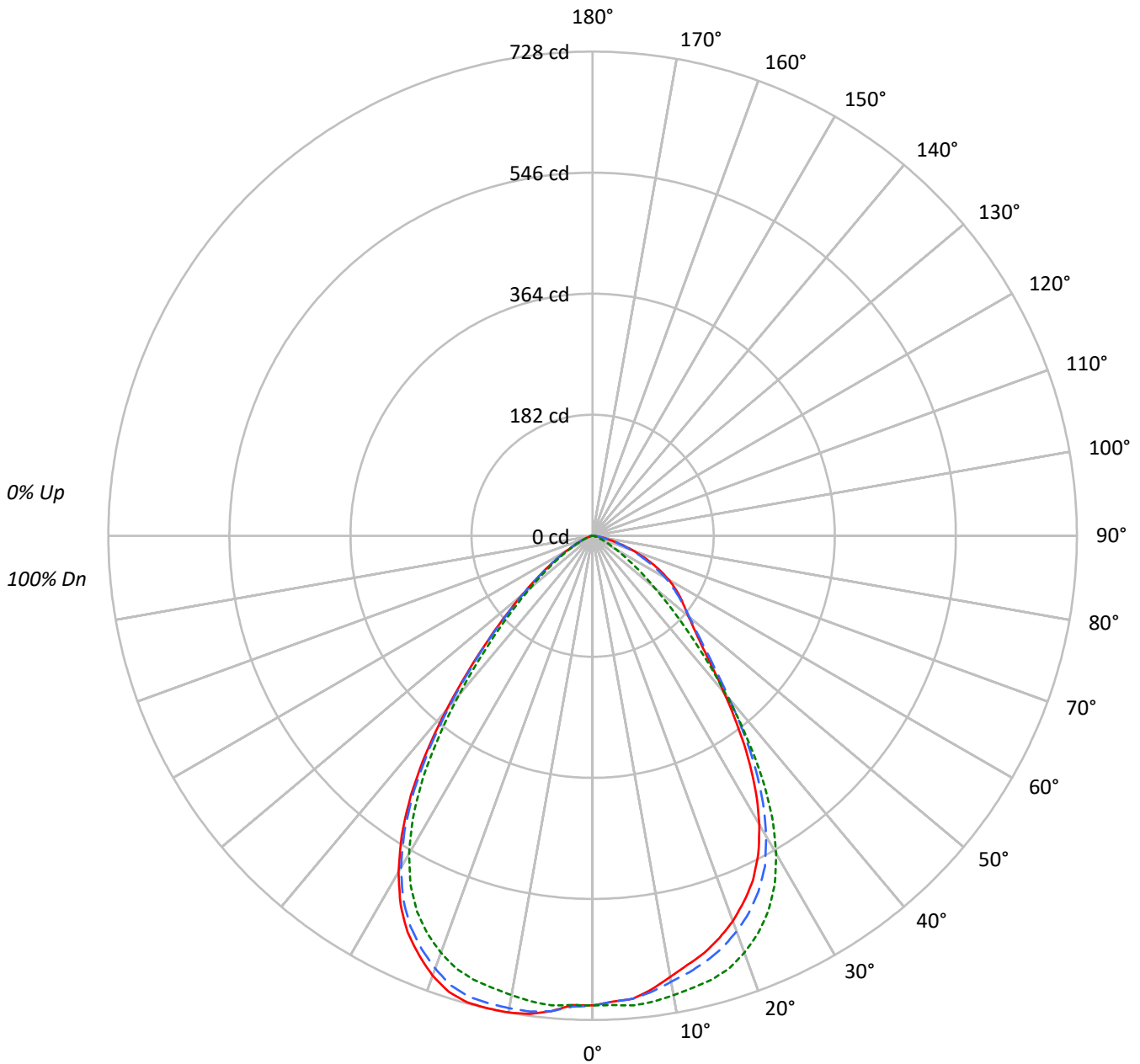
Input Watts (W): 14
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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	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°	46073	46073	46073
5°	45751	46419	46996
10°	44604	46452	48215
15°	43855	46678	49069
20°	42795	46308	48856
25°	41089	44919	47373
30°	37757	41569	43957
35°	32455	35378	37903
40°	26086	26623	29101
45°	21258	18453	20437
50°	19010	12332	14007
55°	18279	8064	9213
60°	17171	5115	5780
65°	15237	3134	3319
70°	12303	1927	1927
75°	8621	1286	1286
80°	5711	939	939
85°	2844	973	973



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.2	5.8
10°-20°	193.9	16.8
20°-30°	282.3	24.5
30°-40°	273.9	23.7
40°-50°	173.1	15.0
50°-60°	96.4	8.4
60°-70°	47.7	4.1
70°-80°	16.8	1.5
80°-90°	2.7	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°	543.4	47.1
0°-40°	817.3	70.8
0°-60°	1086.8	94.2
0°-90°	1154.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1154.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	706	706	706	706	706	
5°	699	699	709	718	718	66
15°	649	662	691	718	726	183
25°	571	590	624	648	658	260
35°	408	426	444	468	476	253
45°	230	237	200	219	222	182
55°	161	157	71	81	81	143
65°	99	91	20	22	22	97
75°	34	32	5	5	5	38
85°	4	4	1	1	1	6
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°	706.2	706.2	706.2	706.2	706.2	706.2	706.2	706.2	706.2	706.2	706.2
2.5°	701.2	694.9	697.4	696.1	697.4	696.1	699.9	696.1	698.6	701.2	696.1
5°	698.6	692.3	693.6	693.6	693.6	693.6	697.4	693.6	696.1	698.6	694.9
7.5°	687.3	682.2	683.5	683.5	683.5	683.5	687.3	684.7	687.3	691.1	687.3
10°	673.3	668.3	670.8	670.8	670.8	670.8	675.9	673.3	675.9	680.9	677.1
12.5°	660.7	656.9	659.4	659.4	659.4	660.7	664.5	663.2	665.7	672.1	668.3
15°	649.3	645.5	648.0	648.0	648.0	649.3	653.1	654.3	656.9	661.9	659.4
17.5°	634.1	630.3	634.1	634.1	632.8	635.4	640.4	640.4	643.0	649.3	648.0
20°	616.4	612.6	616.4	616.4	615.1	617.6	622.7	624.0	626.5	632.8	631.6
22.5°	594.9	593.6	594.9	597.4	596.1	597.4	602.5	603.7	606.3	613.8	612.6
25°	570.8	569.5	572.1	573.3	572.1	573.3	578.4	579.7	582.2	589.8	589.8
27.5°	539.2	537.9	541.7	541.7	541.7	544.2	548.0	550.6	551.8	560.7	559.4
30°	501.2	499.9	502.5	503.7	503.7	503.7	508.8	512.6	513.9	521.5	521.5
32.5°	456.9	456.9	458.2	460.7	459.4	462.0	465.8	468.3	470.8	477.2	477.2
35°	407.5	408.8	410.1	412.6	411.3	412.6	416.4	418.9	420.2	426.5	425.3
37.5°	355.7	356.9	358.2	359.4	359.4	360.7	364.5	365.8	367.0	372.1	369.6
40°	306.3	306.3	307.6	310.1	308.8	311.4	313.9	315.2	315.2	318.9	316.4
42.5°	263.3	264.5	265.8	267.1	267.1	268.3	270.9	272.1	272.1	273.4	269.6
45°	230.4	231.6	231.6	234.1	234.1	235.4	236.7	237.9	236.7	236.7	232.9
47.5°	206.3	207.6	208.8	210.1	210.1	211.4	212.6	212.6	211.4	210.1	205.0
50°	187.3	189.8	189.8	191.1	192.4	193.6	193.6	193.6	191.1	189.8	182.3
52.5°	173.4	174.7	175.9	177.2	177.2	178.5	179.7	178.5	175.9	172.1	164.5
55°	160.7	162.0	163.3	164.5	164.5	164.5	164.5	163.3	160.7	156.9	149.3
57.5°	146.8	148.1	149.3	150.6	150.6	150.6	150.6	149.3	146.8	141.8	132.9
60°	131.6	132.9	134.2	135.4	135.4	135.4	134.2	132.9	130.4	126.6	117.7
62.5°	115.2	116.4	117.7	117.7	117.7	116.4	116.4	115.2	112.6	108.8	100.0
65°	98.7	98.7	100.0	100.0	100.0	100.0	98.7	97.5	94.9	91.1	84.8
67.5°	81.0	82.3	82.3	82.3	82.3	82.3	81.0	81.0	78.5	74.7	69.6
70°	64.5	64.5	65.8	65.8	65.8	65.8	64.5	64.5	62.0	59.5	54.4
72.5°	48.1	48.1	48.1	49.4	49.4	49.4	48.1	48.1	46.8	44.3	40.5
75°	34.2	34.2	34.2	35.4	35.4	35.4	35.4	34.2	32.9	31.6	29.1
77.5°	22.8	24.0	22.8	22.8	22.8	24.0	22.8	22.8	22.8	21.5	19.0
80°	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	13.9	13.9	12.7
82.5°	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	7.6	7.6
85°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
87.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
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°	706.2	706.2	706.2	706.2	706.2	706.2	706.2	706.2	706.2	706.2	706.2
2.5°	699.9	702.4	705.0	702.4	698.6	706.2	705.0	706.2	705.0	702.4	710.0
5°	698.6	701.2	705.0	702.4	699.9	707.5	706.2	708.8	708.8	706.2	713.8
7.5°	691.1	693.6	699.9	697.4	694.9	702.4	703.7	706.2	707.5	705.0	713.8
10°	682.2	684.7	691.1	689.8	688.5	697.4	698.6	701.2	702.4	701.2	710.0
12.5°	673.3	677.1	683.5	682.2	682.2	691.1	692.3	696.1	698.6	697.4	707.5
15°	664.5	669.5	677.1	675.9	675.9	686.0	687.3	691.1	693.6	693.6	703.7
17.5°	653.1	658.1	665.7	664.5	667.0	674.6	677.1	682.2	684.7	683.5	694.9
20°	636.6	643.0	650.6	649.3	650.6	660.7	663.2	667.0	669.5	669.5	679.7
22.5°	617.6	624.0	631.6	630.3	632.8	640.4	643.0	648.0	650.6	649.3	659.4
25°	594.9	601.2	607.5	607.5	608.8	617.6	620.2	624.0	627.8	626.5	635.4
27.5°	564.5	570.8	577.1	575.9	577.1	586.0	588.5	592.3	596.1	594.9	603.7
30°	525.3	531.6	536.6	535.4	536.6	545.5	546.8	551.8	555.6	555.6	563.2
32.5°	479.7	486.0	488.5	486.0	488.5	494.9	497.4	502.5	505.0	506.3	513.9
35°	427.8	431.6	432.9	430.3	430.3	436.7	439.2	444.2	446.8	448.0	454.4
37.5°	370.8	373.4	370.8	367.0	368.3	370.8	374.6	378.4	382.2	383.5	389.8
40°	315.2	313.9	310.1	303.8	302.5	306.3	308.8	312.6	315.2	317.7	321.5
42.5°	265.8	263.3	255.7	248.1	246.8	246.8	248.1	251.9	254.4	255.7	260.7
45°	226.6	221.5	210.1	201.2	196.2	197.4	197.4	200.0	201.2	203.8	207.6
47.5°	196.2	187.3	173.4	162.0	156.9	155.7	155.7	156.9	158.2	160.7	163.3
50°	172.1	160.7	144.3	131.6	125.3	122.8	122.8	121.5	124.0	125.3	127.8
52.5°	153.1	139.2	120.2	106.3	98.7	96.2	94.9	94.9	94.9	96.2	98.7
55°	135.4	120.2	100.0	86.1	77.2	74.7	72.1	70.9	72.1	73.4	74.7
57.5°	120.2	103.8	83.5	68.3	60.8	57.0	54.4	53.2	53.2	54.4	55.7
60°	105.1	88.6	68.3	54.4	46.8	43.0	40.5	39.2	39.2	40.5	40.5
62.5°	88.6	73.4	55.7	43.0	35.4	31.6	29.1	29.1	27.8	27.8	29.1
65°	74.7	60.8	45.6	34.2	26.6	24.0	21.5	20.3	20.3	19.0	20.3
67.5°	60.8	49.4	36.7	26.6	20.3	17.7	15.2	15.2	13.9	13.9	13.9
70°	48.1	39.2	29.1	20.3	16.5	12.7	11.4	10.1	10.1	10.1	10.1
72.5°	35.4	29.1	21.5	15.2	11.4	10.1	8.9	7.6	6.3	6.3	6.3
75°	25.3	20.3	15.2	11.4	8.9	7.6	6.3	5.1	5.1	5.1	5.1
77.5°	17.7	13.9	11.4	7.6	6.3	5.1	3.8	3.8	3.8	3.8	2.5
80°	11.4	8.9	7.6	5.1	3.8	3.8	2.5	2.5	2.5	2.5	2.5
82.5°	6.3	5.1	3.8	3.8	2.5	2.5	1.3	1.3	1.3	1.3	1.3
85°	2.5	2.5	2.5	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
87.5°	1.3	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°	706.2	706.2	706.2	706.2	706.2	706.2	706.2	706.2	706.2	706.2	706.2
2.5°	702.4	707.5	707.5	710.0	706.2	708.8	712.6	711.3	707.5	708.8	710.0
5°	707.5	712.6	713.8	717.6	713.8	717.6	722.7	721.4	717.6	720.2	721.4
7.5°	707.5	713.8	716.4	720.2	717.6	721.4	727.8	726.5	722.7	725.2	727.8
10°	705.0	711.3	715.1	718.9	716.4	721.4	726.5	726.5	724.0	726.5	730.3
12.5°	702.4	708.8	712.6	716.4	713.8	720.2	726.5	725.2	724.0	726.5	730.3
15°	698.6	705.0	708.8	712.6	711.3	717.6	724.0	724.0	721.4	725.2	729.0
17.5°	689.8	696.1	701.2	703.7	702.4	708.8	715.1	715.1	712.6	716.4	720.2
20°	674.6	680.9	686.0	688.5	687.3	692.3	698.6	699.9	697.4	701.2	705.0
22.5°	655.6	660.7	665.7	668.3	667.0	672.1	678.4	679.7	677.1	680.9	683.5
25°	632.8	636.6	641.7	644.2	643.0	648.0	654.3	654.3	653.1	655.6	658.1
27.5°	601.2	606.3	610.1	612.6	612.6	616.4	621.4	622.7	621.4	624.0	627.8
30°	562.0	564.5	569.5	570.8	572.1	575.9	580.9	580.9	579.7	582.2	586.0
32.5°	512.6	516.4	520.2	521.5	522.7	526.5	530.3	531.6	530.3	532.8	536.6
35°	454.4	458.2	462.0	463.2	464.5	468.3	472.1	473.4	472.1	474.6	478.4
37.5°	389.8	392.4	396.2	397.4	400.0	402.5	405.0	407.5	406.3	408.8	411.3
40°	324.0	325.3	329.1	330.3	332.9	335.4	337.9	339.2	339.2	340.5	341.7
42.5°	262.0	264.5	267.1	268.3	270.9	272.1	274.6	275.9	275.9	277.2	278.4
45°	208.8	211.4	213.9	215.2	217.7	219.0	220.2	221.5	220.2	220.2	222.8
47.5°	164.5	167.1	169.6	170.9	172.1	173.4	174.7	174.7	174.7	175.9	175.9
50°	129.1	130.4	132.9	132.9	135.4	135.4	136.7	136.7	136.7	136.7	138.0
52.5°	100.0	101.3	103.8	103.8	105.1	106.3	106.3	106.3	106.3	107.6	106.3
55°	75.9	77.2	78.5	78.5	81.0	81.0	81.0	81.0	81.0	81.0	81.0
57.5°	57.0	58.2	59.5	59.5	59.5	60.8	59.5	60.8	60.8	60.8	60.8
60°	41.8	43.0	43.0	43.0	44.3	44.3	44.3	44.3	44.3	44.3	44.3
62.5°	29.1	29.1	30.4	30.4	30.4	31.6	30.4	30.4	31.6	31.6	30.4
65°	20.3	20.3	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5
67.5°	13.9	13.9	13.9	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2
70°	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
72.5°	6.3	6.3	6.3	6.3	7.6	7.6	7.6	7.6	7.6	7.6	7.6
75°	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
77.5°	2.5	2.5	3.8	3.8	3.8	2.5	2.5	2.5	3.8	3.8	2.5
80°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
82.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
85°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.0	1.3	1.3	1.3
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: LD6A10D010TE ERW6A10835 6LW111H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	706.2	706.2	706.2	706.2
2.5°	710.0	708.8	710.0	706.2
5°	721.4	720.2	722.7	717.6
7.5°	729.0	727.8	730.3	725.2
10°	730.3	730.3	732.8	727.8
12.5°	730.3	730.3	732.8	727.8
15°	730.3	729.0	731.6	726.5
17.5°	721.4	721.4	724.0	718.9
20°	705.0	705.0	707.5	703.7
22.5°	684.7	684.7	686.0	682.2
25°	659.4	658.1	660.7	658.1
27.5°	627.8	626.5	627.8	625.2
30°	584.7	583.5	586.0	583.5
32.5°	536.6	534.1	536.6	534.1
35°	477.2	474.6	477.2	475.9
37.5°	411.3	408.8	411.3	410.1
40°	341.7	340.5	343.0	341.7
42.5°	278.4	275.9	278.4	277.2
45°	222.8	220.2	222.8	221.5
47.5°	175.9	174.7	177.2	175.9
50°	138.0	136.7	138.0	138.0
52.5°	106.3	105.1	106.3	106.3
55°	81.0	79.7	81.0	81.0
57.5°	60.8	59.5	60.8	60.8
60°	44.3	44.3	44.3	44.3
62.5°	31.6	30.4	31.6	31.6
65°	21.5	21.5	21.5	21.5
67.5°	15.2	15.2	15.2	15.2
70°	10.1	10.1	10.1	10.1
72.5°	7.6	7.6	7.6	6.3
75°	5.1	5.1	5.1	5.1
77.5°	3.8	2.5	3.8	3.8
80°	2.5	2.5	2.5	2.5
82.5°	1.3	1.3	1.3	1.3
85°	1.3	1.3	1.3	1.3
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)