

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: P136483

Luminaire Tested: **LD6A10D010TE ERW6A10840 6LW121LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136483
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 ERW6A10840 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 4000K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1253.0 lumens
Efficiency: N/A
Efficacy: 89.5 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

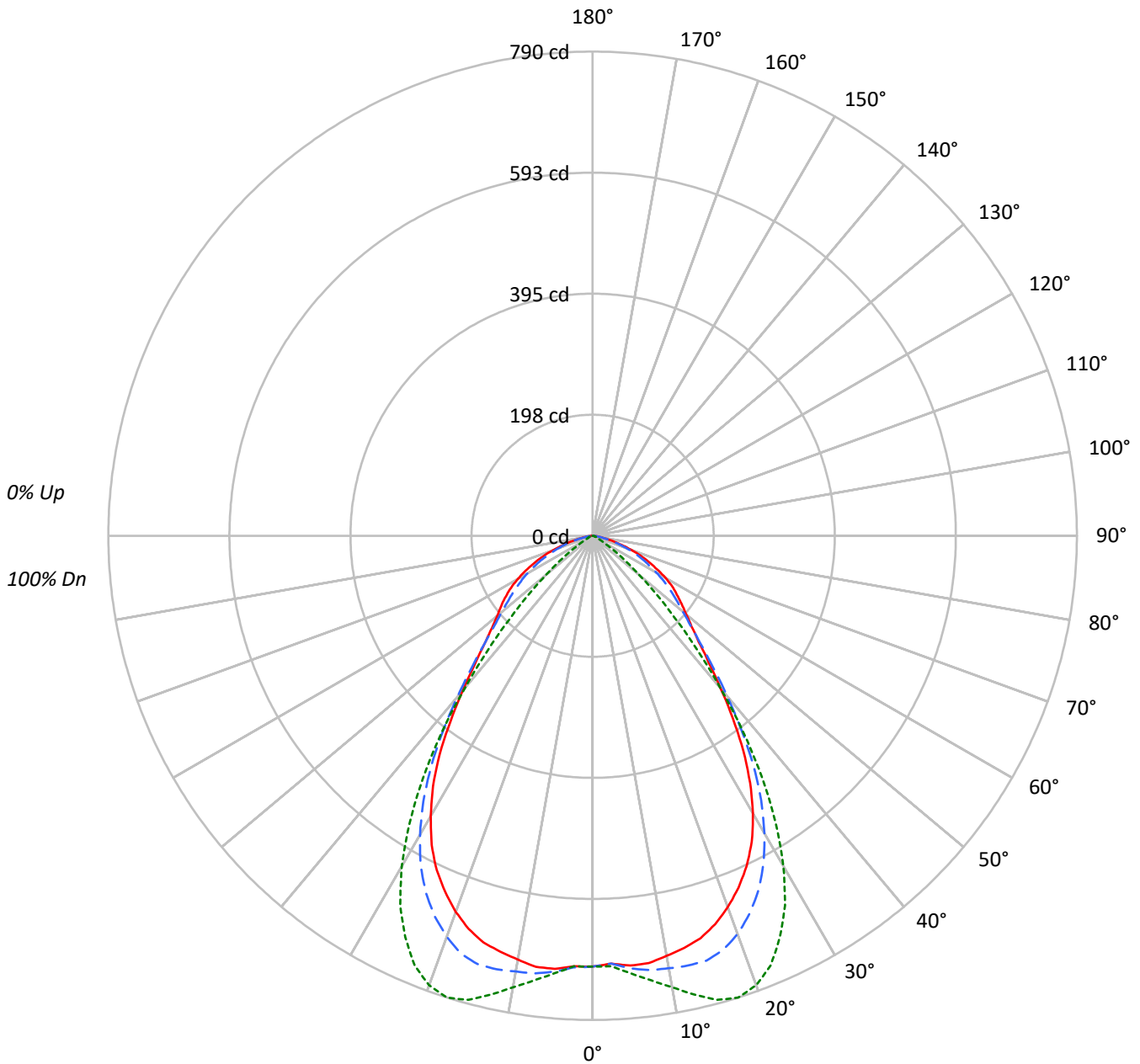
Input Watts (W): 14
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	45871	45871	45871
5°	46105	46930	46458
10°	46108	49553	46519
15°	45915	52946	46401
20°	44767	54174	45329
25°	42802	52038	43321
30°	39392	46888	39791
35°	34143	38428	34645
40°	27653	27653	28028
45°	22586	17539	23001
50°	20208	10018	20573
55°	19075	5096	19689
60°	17902	2218	18372
65°	15638	1250	16194
70°	12666	1030	13181
75°	8822	681	9049
80°	5373	338	5373
85°	2695	674	2695



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.4	5.5
10°-20°	205.0	16.4
20°-30°	298.2	23.8
30°-40°	283.4	22.6
40°-50°	183.6	14.7
50°-60°	115.2	9.2
60°-70°	68.9	5.5
70°-80°	26.9	2.1
80°-90°	3.7	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°	571.5	45.6
0°-40°	854.9	68.2
0°-60°	1153.6	92.1
0°-90°	1253.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1253.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	703	703	703	703	703	
5°	704	708	717	714	709	67
15°	680	718	784	724	687	191
25°	595	640	723	643	602	272
35°	429	457	482	459	435	266
45°	245	248	190	249	249	193
55°	168	154	45	156	173	150
65°	101	89	8	91	105	100
75°	35	30	3	31	36	39
85°	4	4	1	4	4	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°	703.1	703.1	703.1	703.1	703.1	703.1	703.1	703.1	703.1	703.1	703.1
2.5°	698.7	694.2	706.7	699.5	700.4	709.4	702.2	699.5	708.5	698.7	703.1
5°	704.0	700.4	713.0	706.7	707.6	716.6	710.3	707.6	717.5	708.5	713.0
7.5°	703.1	700.4	712.1	706.7	707.6	718.4	712.1	711.2	722.9	714.8	721.1
10°	696.0	692.4	704.9	700.4	702.2	713.9	708.5	708.5	722.0	716.6	725.6
12.5°	688.8	685.2	697.8	694.2	696.0	708.5	704.9	706.7	722.0	718.4	730.0
15°	679.8	676.2	689.7	686.1	687.9	701.3	699.5	701.3	718.4	717.5	730.9
17.5°	664.6	662.8	674.4	672.6	674.4	687.9	687.0	689.7	708.5	708.5	725.6
20°	644.8	642.1	654.7	652.9	653.8	667.3	667.3	670.0	689.7	691.5	708.5
22.5°	621.5	619.7	632.3	629.6	631.4	643.9	643.9	646.6	665.5	668.2	686.1
25°	594.6	592.8	604.5	603.6	604.5	617.0	616.1	619.7	637.7	639.5	656.5
27.5°	562.3	559.6	571.3	571.3	572.2	583.9	583.9	585.6	601.8	603.6	619.7
30°	522.9	520.2	530.9	531.8	531.8	543.5	543.5	544.4	559.6	560.5	574.9
32.5°	478.0	478.0	486.1	487.0	487.0	497.8	498.7	498.7	512.1	512.1	523.8
35°	428.7	429.6	435.9	436.8	437.7	447.5	447.5	446.6	458.3	457.4	467.3
37.5°	375.8	375.8	382.1	383.0	383.0	391.9	391.9	391.0	400.9	398.2	405.4
40°	324.7	324.7	330.0	331.8	330.9	338.1	338.1	337.2	344.4	340.8	344.4
42.5°	279.8	281.6	285.2	286.1	285.2	291.5	290.6	289.7	295.1	289.7	290.6
45°	244.8	246.6	249.3	250.2	249.3	253.8	252.9	251.1	253.8	248.4	245.7
47.5°	218.8	219.7	224.2	223.3	222.4	226.0	226.0	222.4	223.3	216.1	210.8
50°	199.1	200.0	203.6	203.6	201.8	205.4	203.6	200.0	199.1	191.0	183.0
52.5°	183.0	183.9	187.4	187.4	185.6	188.3	186.5	181.2	180.3	172.2	162.3
55°	167.7	168.6	172.2	172.2	170.4	172.2	169.5	165.0	163.2	154.3	143.5
57.5°	154.3	153.4	156.1	156.1	154.3	155.2	153.4	148.9	145.3	137.2	126.5
60°	137.2	136.3	138.1	138.1	136.3	137.2	135.4	130.0	128.3	120.2	109.4
62.5°	118.4	118.4	120.2	120.2	118.4	118.4	117.5	112.1	110.3	103.1	94.2
65°	101.3	101.3	103.1	103.1	101.3	102.2	100.4	96.9	95.1	88.8	80.7
67.5°	84.3	84.3	85.2	85.2	84.3	84.3	83.4	80.7	78.0	73.5	66.4
70°	66.4	66.4	67.3	67.3	66.4	66.4	66.4	63.7	62.8	58.3	52.9
72.5°	49.3	49.3	50.2	50.2	50.2	51.1	50.2	48.4	46.6	43.9	39.5
75°	35.0	35.0	35.0	35.9	35.0	35.0	35.9	34.1	33.2	30.5	27.8
77.5°	23.3	23.3	23.3	23.3	23.3	24.2	23.3	23.3	22.4	20.6	18.8
80°	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	13.5	13.5	11.7
82.5°	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	7.2	6.3
85°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	2.7
87.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
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°	703.1	703.1	703.1	703.1	703.1	703.1	703.1	703.1	703.1	703.1	703.1
2.5°	702.2	703.1	703.1	705.8	708.5	701.3	704.9	703.1	701.3	708.5	704.0
5°	713.9	714.8	714.8	718.4	722.0	713.9	717.5	716.6	714.8	721.1	716.6
7.5°	722.9	725.6	727.3	731.8	736.3	729.1	733.6	731.8	730.9	737.2	730.9
10°	729.1	734.5	737.2	744.4	750.7	743.5	749.8	748.0	747.1	752.5	745.3
12.5°	736.3	743.5	750.7	758.7	767.7	761.4	769.5	766.8	766.8	771.3	762.3
15°	740.8	749.8	759.6	771.3	782.1	777.6	786.5	783.9	783.9	787.4	777.6
17.5°	736.3	748.0	759.6	773.1	785.6	783.0	792.8	790.1	789.2	792.8	781.2
20°	721.1	734.5	748.0	761.4	775.8	774.0	784.7	780.3	781.2	783.0	771.3
22.5°	696.9	711.2	724.7	739.0	752.5	751.6	761.4	758.7	757.8	760.5	748.0
25°	668.2	680.7	693.3	705.8	719.3	717.5	727.3	722.9	723.8	724.7	713.9
27.5°	629.6	641.3	651.1	661.9	674.4	671.7	681.6	679.8	677.1	678.0	669.1
30°	582.1	591.9	599.1	608.1	617.9	615.2	624.2	622.4	620.6	620.6	615.2
32.5°	528.2	535.4	539.9	546.2	553.4	550.7	557.8	556.1	554.3	554.3	550.7
35°	468.2	472.6	472.6	476.2	481.6	477.1	483.4	482.5	479.8	480.7	479.8
37.5°	402.7	404.5	400.9	400.9	404.5	398.2	403.6	403.6	400.9	401.8	401.8
40°	339.0	338.1	330.9	327.4	327.4	321.1	325.6	324.7	322.9	323.8	325.6
42.5°	282.5	277.1	267.3	260.1	258.3	251.1	253.8	252.9	251.1	252.9	255.6
45°	235.0	225.1	211.7	201.8	197.3	190.1	191.0	190.1	189.2	191.0	195.5
47.5°	197.3	183.9	166.8	154.3	148.0	139.9	139.9	139.0	139.0	143.5	146.2
50°	167.7	151.6	131.8	117.5	108.5	101.3	99.6	98.7	99.6	103.1	108.5
52.5°	145.3	125.6	104.0	88.8	78.9	70.9	69.1	68.2	69.1	72.6	78.0
55°	125.6	104.9	82.5	65.5	54.7	47.5	44.8	44.8	44.8	49.3	54.7
57.5°	107.6	87.0	64.6	47.5	37.7	30.5	27.8	26.9	28.7	31.4	36.8
60°	92.4	72.6	51.1	35.9	26.0	19.7	17.0	17.0	17.0	20.6	26.0
62.5°	78.9	61.0	41.3	26.9	18.8	13.5	10.8	10.8	11.7	13.5	18.8
65°	67.3	52.0	35.0	23.3	15.2	10.8	9.0	8.1	9.0	10.8	15.2
67.5°	55.6	43.0	29.6	19.7	13.5	9.0	8.1	7.2	7.2	9.9	12.6
70°	43.9	34.1	24.2	16.1	10.8	7.2	6.3	5.4	6.3	8.1	10.8
72.5°	33.2	26.0	17.9	12.6	8.1	6.3	4.5	4.5	4.5	6.3	8.1
75°	23.3	18.8	13.5	9.0	5.4	3.6	3.6	2.7	3.6	4.5	5.4
77.5°	15.2	12.6	9.0	5.4	3.6	2.7	1.8	1.8	1.8	2.7	3.6
80°	9.9	8.1	5.4	3.6	2.7	1.8	0.9	0.9	0.9	1.8	1.8
82.5°	5.4	4.5	2.7	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9
85°	2.7	1.8	1.8	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9
87.5°	0.9	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°	703.1	703.1	703.1	703.1	703.1	703.1	703.1	703.1	703.1	703.1	703.1
2.5°	704.9	702.2	705.8	708.5	707.6	704.9	709.4	702.2	704.9	702.2	697.8
5°	717.5	714.8	717.5	719.3	718.4	713.9	717.5	711.2	713.0	709.4	704.9
7.5°	730.9	727.3	728.2	729.1	726.5	720.2	722.9	714.8	715.7	711.2	705.8
10°	743.5	738.1	737.2	735.4	730.0	722.0	722.9	713.0	712.1	705.8	699.5
12.5°	759.6	750.7	747.1	743.5	735.4	724.7	722.9	711.2	709.4	702.2	695.1
15°	771.3	761.4	755.2	748.0	737.2	723.8	720.2	706.7	703.1	695.1	687.9
17.5°	774.0	761.4	752.5	743.5	730.9	714.8	709.4	695.1	690.6	681.6	674.4
20°	762.3	748.9	739.0	727.3	714.8	696.0	690.6	675.3	670.0	661.9	654.7
22.5°	739.9	724.7	714.8	703.1	690.6	672.6	666.4	652.0	646.6	638.6	631.4
25°	707.6	693.3	683.4	672.6	661.0	643.0	637.7	624.2	619.7	611.7	604.5
27.5°	662.8	649.3	643.9	633.2	622.4	607.2	601.8	590.1	585.6	580.3	572.2
30°	609.0	597.3	594.6	584.7	576.7	563.2	558.7	548.9	544.4	539.9	532.7
32.5°	547.1	538.1	538.1	530.0	524.7	513.9	510.3	502.2	498.7	495.1	488.8
35°	477.1	470.8	474.4	469.1	466.4	459.2	456.5	450.2	447.5	444.8	438.6
37.5°	402.7	398.2	405.4	406.3	406.3	400.0	398.2	394.6	392.8	390.1	384.8
40°	329.1	328.2	339.0	340.8	346.2	342.6	343.5	340.8	339.0	337.2	333.6
42.5°	261.0	264.6	278.0	286.1	291.5	291.5	294.2	293.3	292.4	290.6	287.9
45°	202.7	209.9	226.0	235.9	246.6	249.3	253.8	253.8	254.7	253.8	251.1
47.5°	155.2	165.9	184.8	200.0	211.7	217.0	223.3	225.1	226.0	226.0	224.2
50°	117.5	130.9	152.5	169.5	185.6	192.8	200.0	202.7	206.3	205.4	203.6
52.5°	88.8	104.0	127.4	148.0	165.0	173.1	181.2	184.8	188.3	188.3	187.4
55°	65.5	81.6	106.7	128.3	146.2	156.1	164.1	167.7	172.2	173.1	172.2
57.5°	47.5	63.7	87.9	111.2	128.3	139.0	147.1	150.7	155.2	156.1	156.1
60°	35.0	51.1	74.4	96.0	112.1	122.9	129.1	133.6	137.2	139.0	139.0
62.5°	26.9	41.3	62.8	82.5	96.9	105.8	112.1	115.7	119.3	120.2	121.1
65°	22.4	35.0	52.9	70.0	82.5	90.6	96.0	99.6	102.2	103.1	103.1
67.5°	18.8	29.6	43.9	57.4	68.2	74.4	78.9	81.6	84.3	85.2	85.2
70°	15.2	23.3	35.0	45.7	53.8	59.2	62.8	65.5	67.3	67.3	67.3
72.5°	11.7	17.9	26.0	34.1	40.4	44.8	47.5	48.4	50.2	50.2	50.2
75°	8.1	12.6	18.8	24.2	27.8	31.4	33.2	34.1	35.0	35.9	35.0
77.5°	5.4	8.1	11.7	15.2	18.8	20.6	21.5	22.4	23.3	23.3	23.3
80°	3.6	5.4	7.2	9.9	11.7	12.6	13.5	13.5	14.3	14.3	14.3
82.5°	1.8	2.7	4.5	5.4	6.3	7.2	7.2	7.2	8.1	8.1	7.2
85°	0.9	0.9	1.8	2.7	2.7	3.6	3.6	3.6	3.6	3.6	3.6
87.5°	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
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 ERW6A10840 6LW121LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	703.1	703.1	703.1	703.1
2.5°	699.5	701.3	694.2	703.1
5°	705.8	707.6	700.4	709.4
7.5°	706.7	707.6	700.4	709.4
10°	700.4	700.4	693.3	702.2
12.5°	695.1	694.2	686.1	695.1
15°	687.0	686.1	678.0	687.0
17.5°	673.5	672.6	664.6	672.6
20°	652.9	652.0	644.8	652.9
22.5°	630.5	628.7	621.5	628.7
25°	604.5	602.7	595.5	601.8
27.5°	571.3	569.5	562.3	568.6
30°	531.8	529.1	523.8	528.2
32.5°	487.0	485.2	478.9	484.3
35°	437.7	435.0	430.5	435.0
37.5°	383.9	382.1	377.6	380.3
40°	331.8	330.9	327.4	329.1
42.5°	287.0	285.2	282.5	284.3
45°	251.1	250.2	247.5	249.3
47.5°	224.2	223.3	220.6	222.4
50°	204.5	203.6	201.8	202.7
52.5°	188.3	187.4	185.6	188.3
55°	174.0	173.1	170.4	173.1
57.5°	157.8	156.9	154.3	157.8
60°	139.9	139.9	137.2	140.8
62.5°	122.0	122.0	120.2	122.9
65°	104.9	104.0	103.1	104.9
67.5°	86.1	85.2	85.2	87.0
70°	68.2	67.3	67.3	69.1
72.5°	51.1	50.2	50.2	51.1
75°	35.9	35.0	35.0	35.9
77.5°	23.3	23.3	23.3	23.3
80°	14.3	14.3	14.3	14.3
82.5°	8.1	8.1	7.2	8.1
85°	3.6	3.6	3.6	3.6
87.5°	0.9	0.9	0.9	0.9
90°	0.0	0.0	0.0	0.0



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













(END OF REPORT)