

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: P136242

Luminaire Tested: **LD6A10D010TE ERW6A10835 6LW111LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136242
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23359-R2)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6A10D010TE ERW6A10835 6LW111LI
Description: PORTFOLIO 6 INCH 60 DEGREE CUTOFF RECESSED SINGLE WALL WASH LUMINAIRE
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: 1235.0 lumens
Efficiency: N/A
Efficacy: 88.2 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.19 / 1.1
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

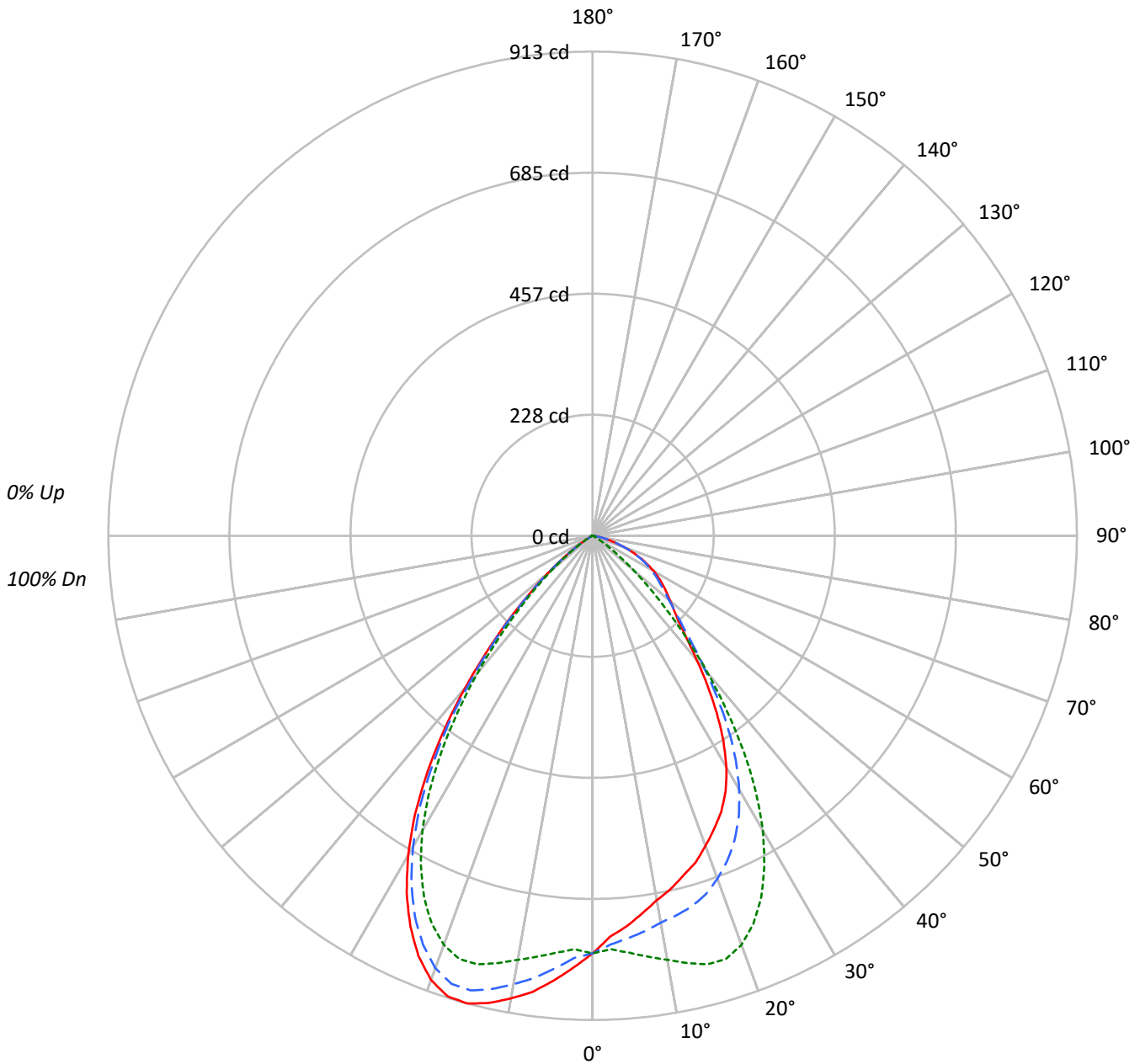
Input Watts (W): 14
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91																			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82																			
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74																			
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	75	71	68	66																			
5	86	76	69	64	84	75	69	64	73	68	63	72	67	63	70	66	62	60																			
6	81	70	63	58	79	70	63	58	68	62	57	66	61	57	65	60	57	55																			
7	76	65	58	53	75	64	58	53	63	57	53	62	56	52	60	56	52	50																			
8	72	60	53	49	70	60	53	48	59	53	48	58	52	48	56	51	48	46																			
9	68	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	43																			
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	51364	51364	51364
5°	48397	51678	55129
10°	46221	53786	58675
15°	44747	56499	61666
20°	43191	56979	61860
25°	41305	54147	58509
30°	37998	48326	52364
35°	32471	39543	43183
40°	25967	28658	31733
45°	21156	18158	20353
50°	19355	9987	11327
55°	18392	4095	4800
60°	17315	1487	1487
65°	15468	818	679
70°	12399	668	496
75°	8192	454	454
80°	4283	338	338
85°	1946	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.0	6.2
10°-20°	227.7	18.4
20°-30°	327.6	26.5
30°-40°	301.0	24.4
40°-50°	172.8	14.0
50°-60°	76.4	6.2
60°-70°	37.5	3.0
70°-80°	14.4	1.2
80°-90°	1.6	0.1
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°	631.3	51.1
0°-40°	932.3	75.5
0°-60°	1181.5	95.7
0°-90°	1235.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1235.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	787	787	787	787	787	
5°	739	762	789	819	842	69
15°	662	723	836	888	913	187
25°	574	634	752	793	813	262
35°	408	446	496	525	542	253
45°	229	239	197	215	221	182
55°	162	154	36	40	42	145
65°	100	97	5	4	4	98
75°	32	34	2	2	2	36
85°	3	3	0	0	0	4
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°	787.3	787.3	787.3	787.3	787.3	787.3	787.3	787.3	787.3	787.3	787.3
2.5°	756.6	761.0	756.6	762.7	766.2	768.0	766.2	761.8	768.0	771.5	770.6
5°	739.0	742.5	739.0	745.1	749.5	753.9	752.2	749.5	756.6	761.8	762.7
7.5°	717.9	722.3	719.7	725.8	731.1	736.4	736.4	735.5	744.3	752.2	754.8
10°	697.7	701.2	699.4	705.6	711.8	717.9	719.7	720.5	730.2	740.7	746.9
12.5°	681.9	683.6	681.9	688.9	695.1	702.1	705.6	707.4	719.7	732.8	740.7
15°	662.5	666.9	665.2	672.2	679.2	687.1	691.5	695.1	708.2	723.2	734.6
17.5°	645.8	647.6	645.8	653.8	659.9	668.7	674.0	678.4	692.4	709.1	721.4
20°	622.1	625.6	624.8	631.8	638.8	646.7	652.0	656.4	671.3	688.0	702.1
22.5°	598.4	601.9	601.9	608.9	614.2	623.0	627.4	631.8	645.8	663.4	675.7
25°	573.8	576.4	575.6	581.7	587.9	596.6	600.2	604.5	617.7	633.5	645.0
27.5°	543.0	544.8	546.6	551.8	556.2	564.1	566.8	571.2	581.7	596.6	607.2
30°	504.4	506.1	508.8	513.2	516.7	524.6	526.3	529.9	540.4	552.7	562.4
32.5°	458.7	459.6	464.0	467.5	471.9	477.1	481.5	482.4	490.3	502.6	509.6
35°	407.7	408.6	413.0	415.6	420.0	425.3	428.8	429.7	436.7	446.4	450.8
37.5°	355.0	360.3	359.4	362.0	366.4	370.8	374.3	374.3	379.6	387.5	389.3
40°	304.9	307.5	310.2	311.9	315.5	319.0	321.6	321.6	325.1	330.4	330.4
42.5°	261.9	266.2	266.2	268.0	270.6	274.2	275.9	275.0	276.8	279.4	277.7
45°	229.3	231.1	232.0	234.6	235.5	239.0	239.9	238.1	239.0	239.0	233.7
47.5°	208.3	208.3	208.3	210.0	210.9	213.5	213.5	210.9	210.0	209.1	202.1
50°	190.7	190.7	191.6	193.3	194.2	195.1	195.1	191.6	190.7	187.2	177.5
52.5°	175.7	176.6	176.6	178.4	179.3	180.1	179.3	175.7	173.1	169.6	158.2
55°	161.7	162.6	163.4	165.2	165.2	165.2	164.3	160.8	158.2	153.8	142.4
57.5°	147.6	148.5	148.5	150.3	151.1	151.1	150.3	146.7	144.1	140.6	128.3
60°	132.7	132.7	133.6	135.3	135.3	136.2	135.3	132.7	130.0	125.7	115.1
62.5°	116.0	116.9	117.7	119.5	120.4	120.4	120.4	117.7	116.0	112.5	101.9
65°	100.2	100.2	101.1	102.8	102.8	105.4	103.7	101.9	100.2	96.7	87.9
67.5°	81.7	82.6	82.6	84.4	85.2	86.1	86.1	84.4	83.5	80.8	72.9
70°	65.0	65.0	65.9	66.8	67.7	68.5	68.5	67.7	66.8	64.1	58.0
72.5°	47.5	48.3	48.3	49.2	51.0	51.8	51.8	51.8	50.1	48.3	43.9
75°	32.5	33.4	33.4	34.3	35.1	36.0	36.0	36.0	35.1	34.3	30.8
77.5°	20.2	20.2	21.1	21.1	22.0	22.8	23.7	23.7	22.8	22.0	20.2
80°	11.4	11.4	12.3	12.3	12.3	13.2	14.1	14.1	14.1	13.2	11.4
82.5°	6.2	6.2	6.2	6.2	6.2	7.0	7.0	7.0	7.0	7.0	6.2
85°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
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°	787.3	787.3	787.3	787.3	787.3	787.3	787.3	787.3	787.3	787.3	787.3
2.5°	770.6	776.8	781.2	774.1	780.3	786.4	793.5	780.3	792.6	785.6	788.2
5°	766.2	773.3	779.4	775.0	782.9	790.8	800.5	789.1	803.1	797.9	802.3
7.5°	760.1	769.7	778.5	776.8	787.3	797.9	810.2	800.5	815.4	812.8	818.1
10°	754.8	768.0	779.4	779.4	793.5	805.8	819.0	811.9	829.5	826.9	833.9
12.5°	751.3	768.0	782.9	785.6	802.3	816.3	832.1	825.1	844.4	841.8	849.7
15°	747.8	767.1	784.7	790.0	808.4	825.1	841.8	836.5	856.7	854.1	862.0
17.5°	736.4	759.2	778.5	785.6	805.8	823.3	840.9	836.5	856.7	854.1	862.0
20°	717.0	739.9	761.0	768.9	789.1	807.5	824.2	820.7	840.9	838.3	845.3
22.5°	692.4	714.4	734.6	742.5	761.8	778.5	795.2	791.7	811.0	806.7	814.6
25°	658.1	681.0	700.3	706.5	724.1	740.7	755.7	752.2	770.6	765.4	773.3
27.5°	623.0	639.7	655.5	660.8	676.6	690.7	704.7	701.2	718.8	712.6	720.5
30°	575.6	588.7	602.8	605.4	620.4	631.8	644.1	641.5	656.4	651.1	658.1
32.5°	520.2	531.6	541.3	542.2	554.5	564.1	574.7	572.9	586.1	581.7	587.0
35°	459.6	466.6	472.7	471.9	481.5	488.6	498.2	496.5	508.8	504.4	509.6
37.5°	395.4	398.9	400.7	397.2	404.2	409.5	416.5	415.6	426.2	422.7	427.9
40°	333.0	333.0	330.4	324.2	328.6	331.3	336.5	336.5	344.5	340.9	345.3
42.5°	275.9	272.4	266.2	257.5	258.3	261.9	261.9	261.9	268.0	264.5	272.4
45°	229.3	221.4	211.8	200.3	196.8	198.6	196.8	196.8	201.2	198.6	204.7
47.5°	193.3	183.6	167.0	152.9	146.7	145.9	143.2	143.2	145.9	145.9	148.5
50°	166.1	152.0	131.8	115.1	106.3	103.7	100.2	98.4	101.1	100.2	101.9
52.5°	144.1	126.5	102.8	83.5	74.7	68.5	65.9	62.4	63.3	63.3	64.1
55°	125.7	105.4	80.0	59.8	50.1	43.1	39.5	36.0	36.0	35.1	36.0
57.5°	111.6	90.5	65.0	44.8	34.3	27.2	23.7	20.2	19.3	19.3	19.3
60°	99.3	79.1	53.6	35.1	24.6	17.6	14.1	11.4	10.5	9.7	9.7
62.5°	87.0	68.5	45.7	29.0	18.5	13.2	9.7	7.0	6.2	5.3	5.3
65°	74.7	58.9	39.5	24.6	15.8	10.5	7.0	5.3	4.4	3.5	3.5
67.5°	61.5	48.3	33.4	20.2	13.2	8.8	6.2	4.4	3.5	2.6	2.6
70°	49.2	38.7	26.4	16.7	10.5	7.0	4.4	3.5	2.6	2.6	2.6
72.5°	36.9	29.0	20.2	12.3	7.9	5.3	3.5	2.6	1.8	1.8	1.8
75°	26.4	21.1	14.1	8.8	5.3	3.5	2.6	1.8	1.8	1.8	1.8
77.5°	16.7	13.2	8.8	5.3	3.5	1.8	1.8	0.9	0.9	0.9	0.9
80°	9.7	7.9	5.3	3.5	1.8	0.9	0.9	0.9	0.9	0.9	0.9
82.5°	5.3	3.5	2.6	1.8	0.9	0.9	0.9	0.0	0.0	0.0	0.0
85°	1.8	1.8	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0
87.5°	0.9	0.9	0.9	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°	787.3	787.3	787.3	787.3	787.3	787.3	787.3	787.3	787.3	787.3	787.3
2.5°	795.2	793.5	799.6	802.3	800.5	797.0	808.4	811.0	803.1	806.7	806.7
5°	811.0	811.0	819.0	822.5	822.5	819.0	832.1	836.5	828.6	832.1	833.0
7.5°	828.6	828.6	838.3	842.7	843.6	840.9	854.1	857.6	852.3	855.9	856.7
10°	844.4	844.4	855.9	860.3	861.1	858.5	871.7	876.1	869.9	873.4	874.3
12.5°	861.1	862.0	873.4	877.8	877.8	875.2	888.4	892.8	885.7	890.1	889.2
15°	873.4	874.3	885.7	890.1	891.0	887.5	899.8	905.1	898.0	900.7	900.7
17.5°	872.6	873.4	884.0	888.4	888.4	885.7	896.3	902.4	895.4	898.0	897.2
20°	855.0	855.9	867.3	870.8	870.8	867.3	876.9	883.1	876.1	877.8	876.9
22.5°	823.3	824.2	834.8	838.3	839.2	834.8	844.4	851.5	843.6	844.4	843.6
25°	782.0	782.0	793.5	793.5	797.9	792.6	799.6	809.3	801.4	801.4	798.7
27.5°	728.4	728.4	739.9	739.9	745.1	739.9	751.3	755.7	748.7	747.8	747.8
30°	666.1	666.1	676.6	676.6	681.0	676.6	688.0	692.4	685.4	684.5	685.4
32.5°	594.9	594.9	605.4	604.5	609.8	606.3	616.9	620.4	615.1	612.5	614.2
35°	516.7	521.1	527.2	526.3	531.6	524.6	537.8	540.4	536.0	536.9	534.3
37.5°	434.1	438.5	442.9	442.9	447.3	445.5	453.4	456.0	452.5	453.4	450.8
40°	351.5	355.9	359.4	359.4	363.8	358.5	369.1	371.7	368.2	364.7	366.4
42.5°	273.3	277.7	281.2	280.3	284.7	283.8	290.0	291.7	289.1	288.2	286.5
45°	205.6	206.5	212.6	215.3	215.3	215.3	219.7	220.6	217.9	217.9	217.0
47.5°	148.5	150.3	154.7	156.4	157.3	156.4	158.2	161.7	159.0	159.0	159.9
50°	102.8	103.7	107.2	109.0	109.0	109.0	109.8	112.5	110.7	110.7	109.0
52.5°	65.9	65.9	68.5	69.4	69.4	69.4	70.3	72.1	70.3	71.2	72.1
55°	36.9	36.9	38.7	39.5	39.5	39.5	40.4	41.3	40.4	41.3	41.3
57.5°	19.3	19.3	20.2	20.2	21.1	21.1	21.1	22.0	22.0	22.0	22.0
60°	9.7	9.7	9.7	10.5	10.5	10.5	10.5	11.4	11.4	11.4	11.4
62.5°	5.3	5.3	5.3	5.3	5.3	5.3	5.3	6.2	6.2	6.2	6.2
65°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
67.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	3.5	3.5	3.5
70°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
72.5°	1.8	1.8	1.8	1.8	1.8	1.8	2.6	2.6	2.6	1.8	1.8
75°	0.9	1.8	1.8	0.9	0.9	1.8	1.8	1.8	1.8	1.8	1.8
77.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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



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CATALOG NUMBER: LD6A10D010TE ERW6A10835 6LW111LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	787.3	787.3	787.3	787.3
2.5°	799.6	800.5	815.4	814.6
5°	826.0	826.9	841.8	841.8
7.5°	849.7	850.6	866.4	867.3
10°	867.3	869.0	884.0	885.7
12.5°	884.0	884.0	898.9	902.4
15°	894.5	894.5	908.6	913.0
17.5°	891.0	891.0	905.1	910.3
20°	871.7	870.8	884.0	891.0
22.5°	838.3	839.2	849.7	857.6
25°	796.1	794.3	805.8	812.8
27.5°	743.4	744.3	751.3	759.2
30°	680.1	681.9	687.1	695.1
32.5°	608.9	611.6	615.1	623.0
35°	530.7	533.4	535.1	542.2
37.5°	446.4	449.9	450.8	457.8
40°	362.9	366.4	366.4	372.6
42.5°	284.7	287.3	286.5	291.7
45°	215.3	217.0	216.2	220.6
47.5°	157.3	159.0	157.3	160.8
50°	109.0	110.7	109.0	111.6
52.5°	70.3	71.2	69.4	72.1
55°	40.4	41.3	40.4	42.2
57.5°	22.8	22.0	21.1	22.8
60°	11.4	11.4	11.4	11.4
62.5°	6.2	6.2	6.2	6.2
65°	3.5	3.5	3.5	4.4
67.5°	3.5	3.5	3.5	3.5
70°	2.6	2.6	2.6	2.6
72.5°	1.8	1.8	1.8	1.8
75°	1.8	1.8	1.8	1.8
77.5°	0.9	0.9	0.9	0.9
80°	0.0	0.0	0.0	0.9
82.5°	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0
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)