

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: P136246

Luminaire Tested: **LD6A10D010TE ERW6A10935 6LW111LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136246
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 ERW6A10935 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: 1133.7 lumens
Efficiency: N/A
Efficacy: 81.0 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

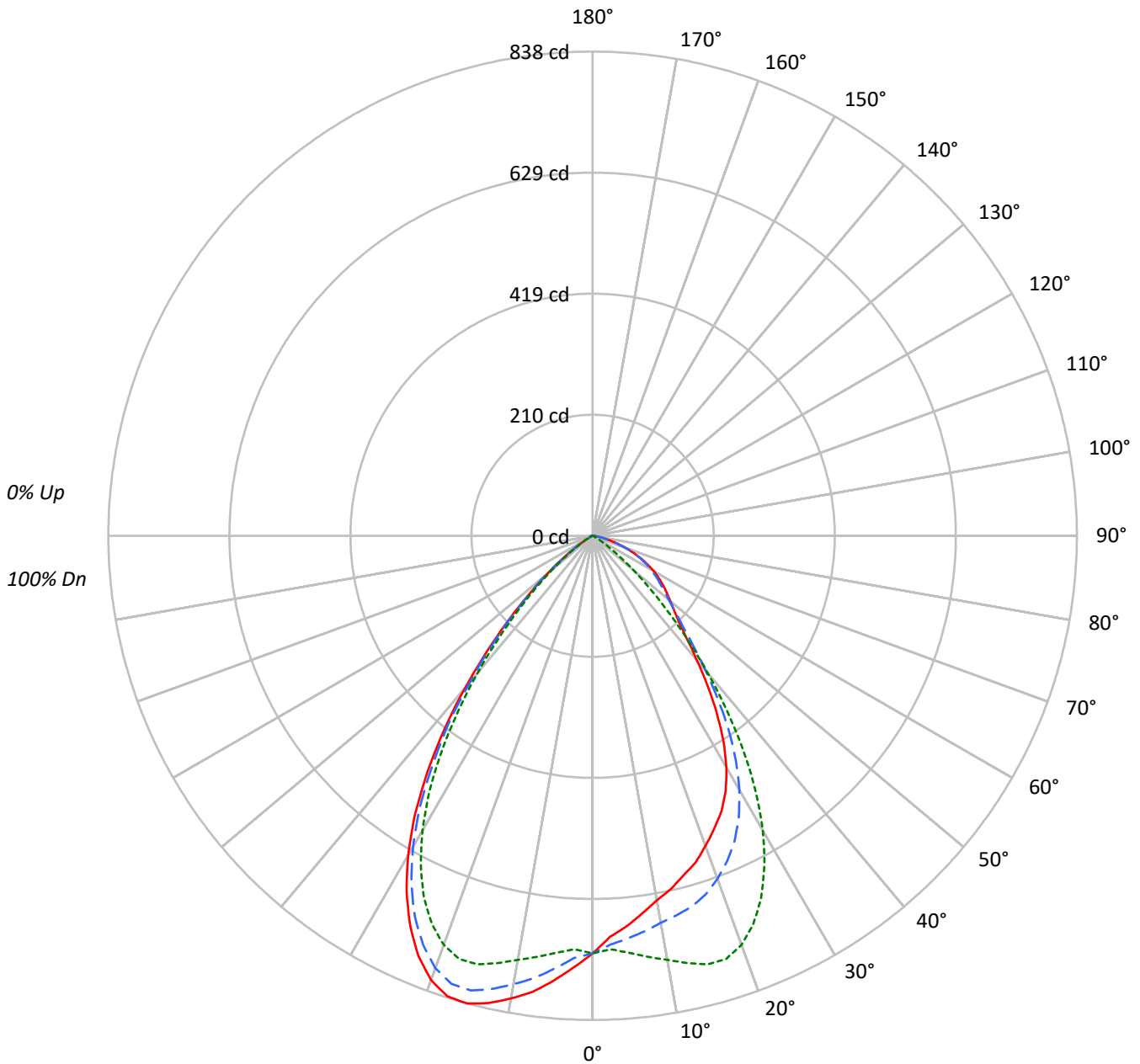
Input Watts (W): 14
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P136246

CATALOG NUMBER: LD6A10D010TE ERW6A10935 6LW111LI

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°	47149	47149	47149
5°	44428	47441	50611
10°	42431	49374	53865
15°	41079	51866	56607
20°	39650	52307	56785
25°	37915	49706	53715
30°	34879	44364	48070
35°	29811	36302	39639
40°	23838	26308	29127
45°	19422	16672	18683
50°	17772	9165	10393
55°	16880	3754	4402
60°	15893	1370	1370
65°	14202	756	617
70°	11388	610	458
75°	7512	429	429
80°	3945	301	301
85°	1797	0	0



TEST NUMBER: P136246

CATALOG NUMBER: LD6A10D010TE ERW6A10935 6LW111LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.7	6.2
10°-20°	209.1	18.4
20°-30°	300.8	26.5
30°-40°	276.3	24.4
40°-50°	158.6	14.0
50°-60°	70.1	6.2
60°-70°	34.4	3.0
70°-80°	13.2	1.2
80°-90°	1.5	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°	579.6	51.1
0°-40°	855.9	75.5
0°-60°	1084.6	95.7
0°-90°	1133.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1133.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	723	723	723	723	723	
5°	678	699	724	752	773	64
15°	608	664	768	815	838	171
25°	527	582	690	728	746	241
35°	374	410	456	482	498	232
45°	210	219	181	198	202	167
55°	148	141	33	36	39	133
65°	92	89	5	3	4	90
75°	30	32	2	2	2	33
85°	2	2	0	0	0	4
90°	0	0	0	0	0	



TEST NUMBER: P136246

CATALOG NUMBER: LD6A10D010TE ERW6A10935 6LW111LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7
2.5°	694.6	698.6	694.6	700.2	703.4	705.0	703.4	699.3	705.0	708.2	707.4
5°	678.4	681.6	678.4	684.0	688.0	692.1	690.5	688.0	694.6	699.3	700.2
7.5°	659.0	663.1	660.7	666.3	671.1	676.0	676.0	675.2	683.3	690.5	692.9
10°	640.5	643.7	642.0	647.7	653.4	659.0	660.7	661.4	670.3	680.0	685.7
12.5°	626.0	627.5	626.0	632.4	638.1	644.5	647.7	649.4	660.7	672.7	680.0
15°	608.2	612.2	610.7	617.1	623.5	630.8	634.8	638.1	650.1	663.9	674.4
17.5°	592.8	594.5	592.8	600.2	605.8	613.9	618.7	622.8	635.6	651.0	662.2
20°	571.1	574.3	573.6	580.0	586.4	593.7	598.5	602.6	616.3	631.6	644.5
22.5°	549.3	552.5	552.5	559.0	563.8	571.9	576.0	580.0	592.8	609.0	620.3
25°	526.7	529.1	528.4	534.0	539.7	547.7	551.0	554.9	567.0	581.6	592.1
27.5°	498.5	500.1	501.8	506.6	510.6	517.8	520.3	524.4	534.0	547.7	557.4
30°	463.0	464.6	467.1	471.1	474.3	481.6	483.1	486.4	496.1	507.4	516.3
32.5°	421.1	421.9	426.0	429.2	433.2	438.0	442.0	442.8	450.1	461.4	467.8
35°	374.3	375.1	379.1	381.5	385.6	390.4	393.6	394.5	400.9	409.8	413.8
37.5°	325.9	330.8	329.9	332.3	336.4	340.4	343.6	343.6	348.5	355.7	357.4
40°	279.9	282.3	284.8	286.3	289.6	292.8	295.2	295.2	298.4	303.3	303.3
42.5°	240.4	244.4	244.4	246.0	248.4	251.7	253.3	252.4	254.1	256.5	254.9
45°	210.5	212.1	213.0	215.4	216.2	219.4	220.2	218.6	219.4	219.4	214.5
47.5°	191.2	191.2	191.2	192.8	193.6	196.0	196.0	193.6	192.8	192.0	185.5
50°	175.1	175.1	175.9	177.4	178.3	179.1	179.1	175.9	175.1	171.8	162.9
52.5°	161.3	162.1	162.1	163.8	164.6	165.3	164.6	161.3	158.9	155.7	145.2
55°	148.4	149.3	150.0	151.7	151.7	151.7	150.8	147.6	145.2	141.2	130.7
57.5°	135.5	136.3	136.3	138.0	138.7	138.7	138.0	134.7	132.3	129.1	117.8
60°	121.8	121.8	122.6	124.2	124.2	125.0	124.2	121.8	119.3	115.4	105.7
62.5°	106.5	107.3	108.0	109.7	110.5	110.5	110.5	108.0	106.5	103.3	93.5
65°	92.0	92.0	92.8	94.4	94.4	96.8	95.2	93.5	92.0	88.8	80.7
67.5°	75.0	75.8	75.8	77.5	78.2	79.0	79.0	77.5	76.7	74.2	66.9
70°	59.7	59.7	60.5	61.3	62.1	62.9	62.9	62.1	61.3	58.8	53.2
72.5°	43.6	44.3	44.3	45.2	46.8	47.6	47.6	47.6	46.0	44.3	40.3
75°	29.8	30.7	30.7	31.5	32.2	33.0	33.0	33.0	32.2	31.5	28.3
77.5°	18.5	18.5	19.4	19.4	20.2	20.9	21.8	21.8	20.9	20.2	18.5
80°	10.5	10.5	11.3	11.3	11.3	12.1	12.9	12.9	12.9	12.1	10.5
82.5°	5.7	5.7	5.7	5.7	5.7	6.4	6.4	6.4	6.4	6.4	5.7
85°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	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



TEST NUMBER: P136246

CATALOG NUMBER: LD6A10D010TE ERW6A10935 6LW111LI

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7
2.5°	707.4	713.1	717.1	710.6	716.3	721.9	728.4	716.3	727.6	721.2	723.6
5°	703.4	709.9	715.5	711.4	718.7	726.0	734.9	724.4	737.2	732.5	736.5
7.5°	697.8	706.6	714.7	713.1	722.7	732.5	743.8	734.9	748.5	746.2	751.0
10°	692.9	705.0	715.5	715.5	728.4	739.7	751.8	745.3	761.5	759.1	765.5
12.5°	689.7	705.0	718.7	721.2	736.5	749.4	763.9	757.4	775.2	772.8	780.0
15°	686.5	704.2	720.4	725.2	742.1	757.4	772.8	767.9	786.5	784.1	791.3
17.5°	676.0	696.9	714.7	721.2	739.7	755.8	771.9	767.9	786.5	784.1	791.3
20°	658.2	679.2	698.6	705.9	724.4	741.3	756.6	753.4	771.9	769.6	776.0
22.5°	635.6	655.8	674.4	681.6	699.3	714.7	730.0	726.8	744.5	740.6	747.8
25°	604.1	625.2	642.9	648.6	664.7	680.0	693.7	690.5	707.4	702.6	709.9
27.5°	571.9	587.2	601.7	606.6	621.1	634.1	646.9	643.7	659.9	654.2	661.4
30°	528.4	540.4	553.4	555.8	569.5	580.0	591.3	588.9	602.6	597.7	604.1
32.5°	477.5	488.0	496.9	497.7	509.0	517.8	527.6	525.9	538.0	534.0	538.9
35°	421.9	428.3	433.9	433.2	442.0	448.5	457.3	455.8	467.1	463.0	467.8
37.5°	363.0	366.2	367.8	364.6	371.1	375.9	382.3	381.5	391.3	388.0	392.8
40°	305.7	305.7	303.3	297.6	301.7	304.1	308.9	308.9	316.3	312.9	317.0
42.5°	253.3	250.1	244.4	236.4	237.1	240.4	240.4	240.4	246.0	242.8	250.1
45°	210.5	203.2	194.4	183.9	180.7	182.3	180.7	180.7	184.7	182.3	187.9
47.5°	177.4	168.5	153.3	140.4	134.7	133.9	131.5	131.5	133.9	133.9	136.3
50°	152.5	139.5	121.0	105.7	97.6	95.2	92.0	90.3	92.8	92.0	93.5
52.5°	132.3	116.1	94.4	76.7	68.6	62.9	60.5	57.3	58.1	58.1	58.8
55°	115.4	96.8	73.4	54.9	46.0	39.6	36.3	33.0	33.0	32.2	33.0
57.5°	102.4	83.1	59.7	41.1	31.5	25.0	21.8	18.5	17.7	17.7	17.7
60°	91.2	72.6	49.2	32.2	22.6	16.2	12.9	10.5	9.6	8.9	8.9
62.5°	79.9	62.9	42.0	26.6	17.0	12.1	8.9	6.4	5.7	4.9	4.9
65°	68.6	54.1	36.3	22.6	14.5	9.6	6.4	4.9	4.0	3.2	3.2
67.5°	56.5	44.3	30.7	18.5	12.1	8.1	5.7	4.0	3.2	2.4	2.4
70°	45.2	35.5	24.2	15.3	9.6	6.4	4.0	3.2	2.4	2.4	2.4
72.5°	33.9	26.6	18.5	11.3	7.3	4.9	3.2	2.4	1.7	1.7	1.7
75°	24.2	19.4	12.9	8.1	4.9	3.2	2.4	1.7	1.7	1.7	1.7
77.5°	15.3	12.1	8.1	4.9	3.2	1.7	1.7	0.8	0.8	0.8	0.8
80°	8.9	7.3	4.9	3.2	1.7	0.8	0.8	0.8	0.8	0.8	0.8
82.5°	4.9	3.2	2.4	1.7	0.8	0.8	0.8	0.0	0.0	0.0	0.0
85°	1.7	1.7	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0
87.5°	0.8	0.8	0.8	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



TEST NUMBER: P136246

CATALOG NUMBER: LD6A10D010TE ERW6A10935 6LW111LI

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7
2.5°	730.0	728.4	734.0	736.5	734.9	731.6	742.1	744.5	737.2	740.6	740.6
5°	744.5	744.5	751.8	755.1	755.1	751.8	763.9	767.9	760.7	763.9	764.7
7.5°	760.7	760.7	769.6	773.6	774.4	771.9	784.1	787.3	782.4	785.7	786.5
10°	775.2	775.2	785.7	789.8	790.5	788.1	800.2	804.3	798.6	801.8	802.6
12.5°	790.5	791.3	801.8	805.8	805.8	803.4	815.6	819.6	813.1	817.1	816.3
15°	801.8	802.6	813.1	817.1	817.9	814.7	826.0	830.9	824.4	826.8	826.8
17.5°	801.0	801.8	811.5	815.6	815.6	813.1	822.8	828.4	822.0	824.4	823.6
20°	784.9	785.7	796.2	799.4	799.4	796.2	805.0	810.7	804.3	805.8	805.0
22.5°	755.8	756.6	766.3	769.6	770.4	766.3	775.2	781.7	774.4	775.2	774.4
25°	717.9	717.9	728.4	728.4	732.5	727.6	734.0	742.9	735.7	735.7	733.2
27.5°	668.7	668.7	679.2	679.2	684.0	679.2	689.7	693.7	687.3	686.5	686.5
30°	611.5	611.5	621.1	621.1	625.2	621.1	631.6	635.6	629.2	628.4	629.2
32.5°	546.1	546.1	555.8	554.9	559.8	556.6	566.3	569.5	564.7	562.3	563.8
35°	474.3	478.4	484.0	483.1	488.0	481.6	493.7	496.1	492.0	492.9	490.5
37.5°	398.5	402.5	406.6	406.6	410.6	409.0	416.2	418.6	415.4	416.2	413.8
40°	322.7	326.7	329.9	329.9	334.0	329.1	338.8	341.2	338.0	334.8	336.4
42.5°	250.9	254.9	258.1	257.3	261.4	260.5	266.2	267.8	265.4	264.6	263.0
45°	188.7	189.6	195.2	197.6	197.6	197.6	201.7	202.5	200.0	200.0	199.2
47.5°	136.3	138.0	142.0	143.6	144.4	143.6	145.2	148.4	146.0	146.0	146.8
50°	94.4	95.2	98.4	100.1	100.1	100.1	100.8	103.3	101.6	101.6	100.1
52.5°	60.5	60.5	62.9	63.7	63.7	63.7	64.5	66.2	64.5	65.4	66.2
55°	33.9	33.9	35.5	36.3	36.3	36.3	37.1	37.9	37.1	37.9	37.9
57.5°	17.7	17.7	18.5	18.5	19.4	19.4	19.4	20.2	20.2	20.2	20.2
60°	8.9	8.9	8.9	9.6	9.6	9.6	9.6	10.5	10.5	10.5	10.5
62.5°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	5.7	5.7	5.7	5.7
65°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
67.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	3.2	3.2	3.2
70°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
72.5°	1.7	1.7	1.7	1.7	1.7	1.7	2.4	2.4	2.4	1.7	1.7
75°	0.8	1.7	1.7	0.8	0.8	1.7	1.7	1.7	1.7	1.7	1.7
77.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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



TEST NUMBER: P136246

CATALOG NUMBER: LD6A10D010TE ERW6A10935 6LW111LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	722.7	722.7	722.7	722.7
2.5°	734.0	734.9	748.5	747.8
5°	758.3	759.1	772.8	772.8
7.5°	780.0	780.9	795.4	796.2
10°	796.2	797.7	811.5	813.1
12.5°	811.5	811.5	825.2	828.4
15°	821.2	821.2	834.1	838.1
17.5°	817.9	817.9	830.9	835.7
20°	800.2	799.4	811.5	817.9
22.5°	769.6	770.4	780.0	787.3
25°	730.8	729.2	739.7	746.2
27.5°	682.4	683.3	689.7	696.9
30°	624.3	626.0	630.8	638.1
32.5°	559.0	561.4	564.7	571.9
35°	487.2	489.7	491.2	497.7
37.5°	409.8	413.0	413.8	420.3
40°	333.1	336.4	336.4	342.0
42.5°	261.4	263.7	263.0	267.8
45°	197.6	199.2	198.5	202.5
47.5°	144.4	146.0	144.4	147.6
50°	100.1	101.6	100.1	102.4
52.5°	64.5	65.4	63.7	66.2
55°	37.1	37.9	37.1	38.7
57.5°	20.9	20.2	19.4	20.9
60°	10.5	10.5	10.5	10.5
62.5°	5.7	5.7	5.7	5.7
65°	3.2	3.2	3.2	4.0
67.5°	3.2	3.2	3.2	3.2
70°	2.4	2.4	2.4	2.4
72.5°	1.7	1.7	1.7	1.7
75°	1.7	1.7	1.7	1.7
77.5°	0.8	0.8	0.8	0.8
80°	0.0	0.0	0.0	0.8
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)