

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: P252655

Luminaire Tested: **LD6B10D010 EU6B10209030 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252655
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-9)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B10D010 EU6B10209030 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 848.0 lumens
Efficiency: N/A
Efficacy: 84.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

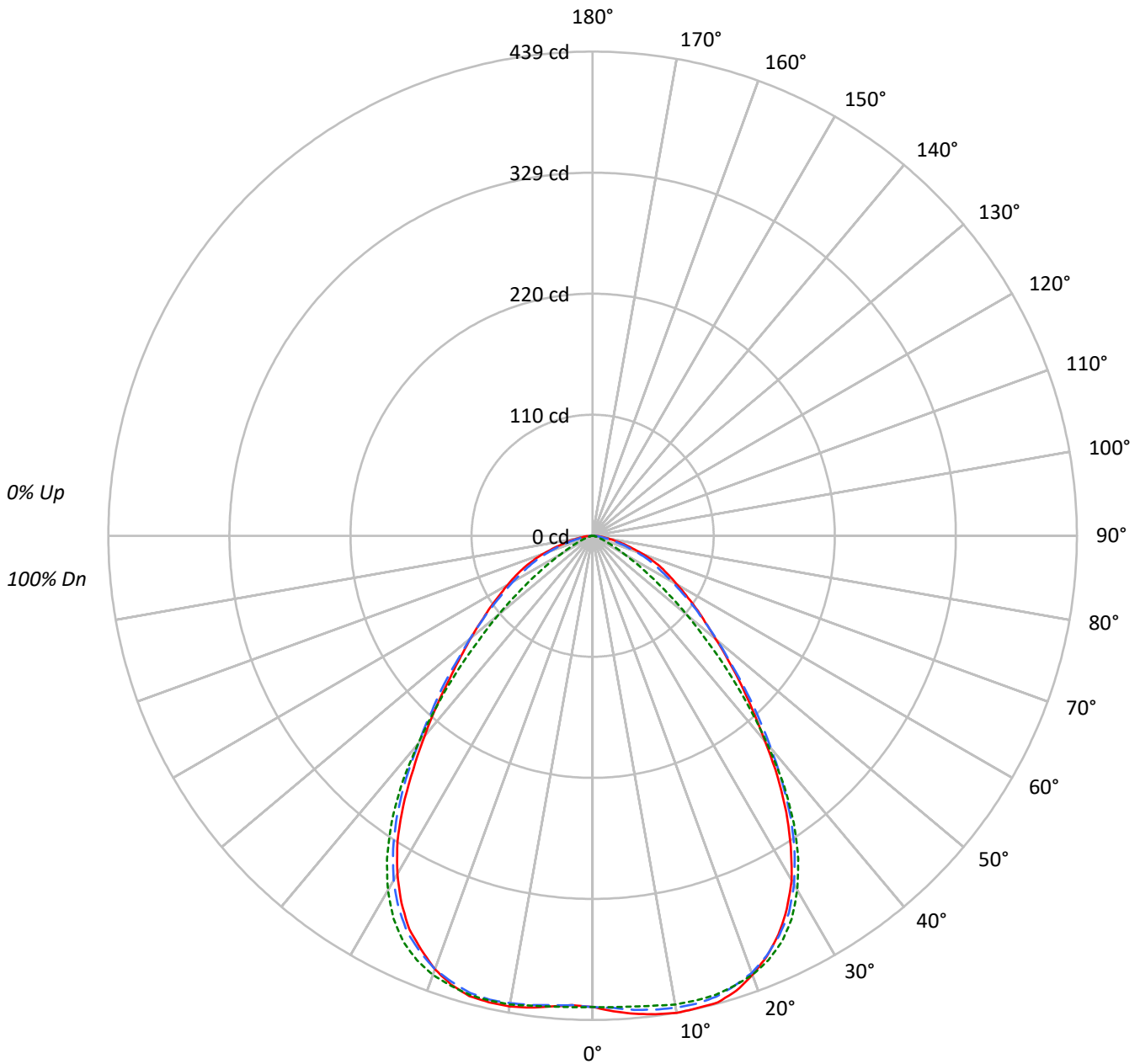
Input Watts (W): 10.05
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252655

CATALOG NUMBER: LD6B10D010 EU6B10209030 6LBDW1H

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	107	104	101	109	105	102	99	101	98	96	97	95	93	94	92	91	89																			
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78																			
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68																			
4	89	78	71	65	87	77	70	65	75	69	64	73	67	63	71	66	62	61																			
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54																			
6	77	65	57	52	75	64	57	51	63	56	51	61	55	51	59	54	50	48																			
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	45	44																			
8	67	55	47	42	66	54	47	42	53	47	42	52	46	42	51	45	41	40																			
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36																			
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	27871	27871	27871
5°	28495	28056	28056
10°	29102	28586	28705
15°	29590	29104	29185
20°	29410	29410	29035
25°	28708	29233	28319
30°	27180	27949	26676
35°	24355	25319	23869
40°	20687	20951	20176
45°	17512	15999	16894
50°	14778	11286	14595
55°	12990	7291	12853
60°	11508	4332	11587
65°	10636	2609	10636
70°	9213	1507	8984
75°	7310	907	6856
80°	5448	676	5222
85°	4940	449	4491



TEST NUMBER: P252655

CATALOG NUMBER: LD6B10D010 EU6B10209030 6LBDW1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.1	4.9
10°-20°	121.7	14.4
20°-30°	183.1	21.6
30°-40°	192.5	22.7
40°-50°	143.8	17.0
50°-60°	89.5	10.6
60°-70°	50.9	6.0
70°-80°	21.0	2.5
80°-90°	4.3	0.5
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°	346.0	40.8
0°-40°	538.5	63.5
0°-60°	771.8	91.0
0°-90°	848.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	848.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	427	427	427	427	427	
5°	435	432	428	427	428	42
15°	438	433	431	429	432	123
25°	399	400	406	397	393	183
35°	306	314	318	309	300	190
45°	190	194	173	190	183	147
55°	114	112	64	110	113	103
65°	69	62	17	62	69	68
75°	29	23	4	22	27	32
85°	7	4	1	4	6	7
90°	0	0	0	0	0	



TEST NUMBER: P252655

CATALOG NUMBER: LD6B10D010 EU6B10209030 6LBDW1H

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	427.2	427.2	427.2	427.2	427.2	427.2	427.2	427.2	427.2	427.2	427.2
2.5°	431.5	430.9	431.5	430.3	429.7	429.7	430.3	429.1	428.4	429.1	428.4
5°	435.1	433.9	434.5	433.9	432.7	432.7	433.3	431.5	431.5	432.1	431.5
7.5°	437.5	437.5	437.5	436.3	435.7	435.1	436.3	434.5	433.9	433.9	433.3
10°	439.3	438.7	439.3	438.1	436.9	436.3	437.5	436.3	435.1	436.3	434.5
12.5°	438.7	438.7	438.7	438.1	436.9	436.3	437.5	435.7	435.1	435.7	434.5
15°	438.1	436.3	436.9	436.3	434.5	434.5	435.1	433.3	432.1	433.9	432.7
17.5°	432.7	431.5	432.1	430.9	429.7	429.1	429.7	429.1	427.8	429.1	427.8
20°	423.6	423.6	424.2	423.0	421.8	421.2	422.4	421.2	420.0	421.8	421.8
22.5°	412.7	412.7	412.7	412.1	411.5	411.5	411.5	410.9	410.3	411.5	412.1
25°	398.8	398.2	398.8	399.4	398.8	398.2	398.8	398.8	397.6	400.0	400.0
27.5°	381.3	381.3	382.5	381.9	381.9	381.3	382.5	382.5	381.9	383.7	385.5
30°	360.8	359.6	360.8	360.8	361.4	361.4	362.0	362.0	362.0	363.8	365.0
32.5°	334.2	334.8	336.6	336.0	335.4	337.2	337.2	338.4	339.0	340.2	340.8
35°	305.8	306.4	306.4	307.0	308.2	307.0	310.0	309.4	310.0	312.4	313.6
37.5°	275.6	273.7	276.8	275.6	276.2	276.2	277.4	278.0	279.8	282.8	282.8
40°	242.9	243.5	244.7	245.3	246.0	246.0	246.0	247.8	248.4	252.0	251.4
42.5°	214.5	214.5	215.7	216.3	216.3	216.3	216.3	218.2	219.4	220.6	221.8
45°	189.8	187.9	189.1	189.1	190.4	189.8	191.0	192.2	192.8	194.6	194.0
47.5°	166.2	165.6	166.2	166.8	166.2	166.8	167.4	168.0	168.6	168.6	168.6
50°	145.6	145.6	146.2	146.8	146.8	146.8	146.8	147.4	147.4	148.7	147.4
52.5°	128.7	129.3	129.3	128.7	129.3	129.3	129.9	129.9	129.3	129.3	127.5
55°	114.2	113.6	114.2	113.6	114.2	114.2	113.6	113.6	113.0	112.4	111.8
57.5°	100.3	100.3	100.3	100.3	99.7	100.3	99.7	99.1	99.1	97.9	96.1
60°	88.2	88.2	88.2	88.2	88.2	87.6	88.2	87.6	86.4	85.2	82.8
62.5°	78.0	77.4	78.0	77.4	77.4	76.7	76.7	76.1	74.9	73.7	71.3
65°	68.9	69.5	68.9	68.9	68.3	67.7	67.7	67.1	65.3	64.1	61.6
67.5°	59.2	58.6	58.6	58.6	58.0	58.0	58.0	56.8	55.6	53.8	51.4
70°	48.3	48.3	48.3	47.7	47.7	47.1	47.1	46.5	45.3	44.1	41.1
72.5°	38.1	38.1	38.1	36.9	37.5	36.9	36.9	35.7	35.0	33.2	31.4
75°	29.0	29.0	28.4	28.4	27.8	27.2	27.2	26.6	26.0	24.8	23.0
77.5°	21.2	21.2	21.2	20.5	19.9	19.3	19.3	18.7	18.1	17.5	16.3
80°	14.5	14.5	14.5	14.5	13.9	13.3	13.3	12.7	12.7	12.1	10.9
82.5°	9.7	9.7	9.7	9.7	9.1	9.1	9.1	8.5	7.9	7.9	6.6
85°	6.6	6.6	6.0	6.0	6.0	6.0	5.4	5.4	4.8	4.2	4.2
87.5°	3.6	3.6	3.6	3.6	3.0	3.0	3.0	3.0	2.4	2.4	1.8
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: P252655

CATALOG NUMBER: LD6B10D010 EU6B10209030 6LBDW1H

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	427.2	427.2	427.2	427.2	427.2	427.2	427.2	427.2	427.2	427.2	427.2
2.5°	430.3	430.3	429.7	427.8	428.4	427.8	428.4	427.8	426.0	427.8	426.0
5°	432.7	433.3	432.1	429.7	430.3	429.7	429.7	429.1	427.2	428.4	427.2
7.5°	435.1	434.5	433.9	431.5	432.1	431.5	431.5	430.3	428.4	429.7	427.8
10°	436.3	436.3	435.1	432.7	432.7	432.1	432.7	432.1	429.7	431.5	430.3
12.5°	436.3	435.7	435.7	432.7	433.3	432.7	433.3	432.1	430.3	431.5	430.9
15°	434.5	434.5	433.9	430.9	431.5	431.5	432.1	430.9	429.1	430.9	429.7
17.5°	430.9	430.9	430.3	427.8	429.1	429.1	429.7	428.4	426.6	427.8	427.8
20°	423.6	424.2	424.2	422.4	423.6	423.6	424.2	423.6	423.0	423.6	422.4
22.5°	415.2	416.4	416.4	414.6	415.8	415.8	417.6	417.0	415.8	416.4	415.8
25°	402.5	403.7	404.9	403.7	404.9	404.9	406.7	406.1	404.9	406.1	404.3
27.5°	388.0	388.6	389.8	388.6	390.4	389.8	391.6	391.0	389.2	391.0	390.4
30°	367.4	369.8	371.6	369.8	371.6	371.6	372.9	372.2	371.6	371.0	371.0
32.5°	344.5	346.9	346.9	346.3	347.5	347.5	348.1	346.9	346.3	346.9	347.5
35°	316.0	317.3	318.5	317.9	318.5	319.1	318.5	319.1	317.3	317.9	317.9
37.5°	285.2	286.4	286.4	284.6	285.8	285.8	284.6	284.6	283.4	284.6	282.2
40°	252.6	251.4	252.0	250.8	249.6	249.6	249.0	246.6	245.3	246.0	246.6
42.5°	220.6	220.6	218.8	215.7	212.7	212.7	210.9	209.7	207.3	208.5	207.9
45°	193.4	190.4	187.9	183.1	181.3	180.1	177.1	174.0	172.8	173.4	172.8
47.5°	167.4	165.0	158.9	152.3	150.5	148.7	145.0	141.4	140.2	139.0	139.0
50°	145.6	141.4	134.8	127.5	124.5	121.5	116.6	113.0	110.6	111.2	111.2
52.5°	125.7	120.9	113.0	103.9	100.3	96.7	92.5	88.2	86.4	85.8	85.8
55°	108.2	102.7	94.9	84.6	81.6	77.4	71.9	67.1	64.7	64.1	65.3
57.5°	92.5	87.6	78.6	68.3	64.7	60.4	55.0	50.8	47.7	47.1	47.7
60°	79.8	73.1	65.3	55.6	50.8	47.1	41.1	37.5	34.4	33.2	33.8
62.5°	67.1	61.0	53.2	43.5	39.9	36.3	30.8	26.6	24.2	23.6	24.2
65°	57.4	51.4	44.1	35.7	32.0	28.4	23.6	19.3	17.5	16.9	17.5
67.5°	47.7	42.3	36.3	28.4	25.4	22.4	17.5	14.5	12.1	11.5	12.1
70°	38.7	33.8	27.8	22.4	19.3	16.9	13.3	10.3	8.5	7.9	8.5
72.5°	29.0	25.4	21.2	16.3	14.5	12.7	9.7	7.3	6.0	5.4	6.0
75°	21.2	18.1	15.1	11.5	10.3	9.1	6.6	4.8	4.2	3.6	4.2
77.5°	14.5	12.7	10.3	7.9	6.6	6.0	4.2	3.6	3.0	2.4	2.4
80°	9.7	8.5	6.6	5.4	4.8	4.2	3.0	2.4	1.8	1.8	1.8
82.5°	6.0	4.8	4.2	3.0	2.4	2.4	1.8	1.2	1.2	1.2	1.2
85°	3.6	3.0	2.4	1.8	1.2	1.2	0.6	0.6	0.6	0.6	0.6
87.5°	1.8	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.0	0.0	0.6
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: P252655

CATALOG NUMBER: LD6B10D010 EU6B10209030 6LBDW1H

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	427.2	427.2	427.2	427.2	427.2	427.2	427.2	427.2	427.2	427.2	427.2
2.5°	427.2	426.0	426.0	426.6	427.2	427.8	426.6	426.0	426.0	427.8	426.6
5°	427.2	426.6	426.6	426.6	427.8	428.4	427.2	426.6	427.2	429.1	428.4
7.5°	429.1	427.8	428.4	428.4	429.1	430.3	429.1	428.4	429.1	430.9	429.7
10°	430.3	429.1	429.7	429.1	430.9	431.5	430.3	429.7	430.3	432.7	432.1
12.5°	430.9	430.3	430.3	429.7	431.5	432.1	430.9	430.3	430.9	432.7	432.1
15°	429.7	429.1	429.1	429.1	430.3	431.5	429.7	429.1	429.1	430.9	430.3
17.5°	427.2	426.0	426.0	426.0	426.6	427.2	425.4	424.8	424.2	426.0	425.4
20°	423.0	421.8	420.6	420.6	421.2	421.2	420.0	418.2	418.2	418.8	417.6
22.5°	415.2	414.6	413.3	412.7	413.9	413.3	410.9	409.1	408.5	409.1	407.9
25°	404.3	403.1	402.5	401.9	402.5	401.9	399.4	397.0	397.0	397.0	395.2
27.5°	389.2	388.0	387.4	387.4	388.0	386.8	384.3	381.9	380.7	380.7	378.9
30°	369.8	369.8	369.2	368.6	368.0	368.0	364.4	362.0	360.8	361.4	360.2
32.5°	346.3	345.7	345.1	343.2	343.8	343.2	340.2	338.4	336.6	335.4	334.8
35°	316.0	316.0	315.4	315.4	315.4	314.8	311.8	310.0	308.8	308.2	306.4
37.5°	282.8	282.2	281.6	281.6	281.6	281.6	279.8	278.0	278.0	277.4	276.2
40°	245.3	246.0	246.6	246.0	247.8	249.6	247.2	246.0	245.3	247.2	244.7
42.5°	209.1	208.5	211.5	212.1	212.1	215.1	215.7	216.3	215.7	216.9	216.9
45°	174.0	173.4	176.5	177.7	180.7	184.3	186.1	189.1	190.4	191.6	190.4
47.5°	140.8	143.2	145.6	148.7	151.1	157.1	160.7	163.8	165.0	166.8	166.8
50°	113.0	115.4	119.7	122.1	125.1	132.3	138.4	142.6	145.0	146.8	146.2
52.5°	87.0	91.2	96.7	99.1	103.3	111.8	118.4	123.3	126.3	128.1	128.7
55°	67.1	70.7	76.1	79.8	84.0	93.1	101.5	107.0	110.0	112.4	113.6
57.5°	49.6	53.8	59.8	62.8	67.7	78.0	85.2	91.9	95.5	98.5	99.1
60°	36.3	40.5	45.9	49.6	54.4	64.7	73.1	79.2	83.4	85.8	87.0
62.5°	26.0	30.2	35.7	39.3	43.5	52.6	61.0	67.1	71.3	74.3	76.1
65°	18.7	23.0	28.4	31.4	35.0	43.5	51.4	57.4	61.6	65.3	66.5
67.5°	13.9	16.9	21.8	24.8	28.4	35.0	41.7	47.1	51.4	54.4	55.6
70°	10.3	12.7	16.9	18.7	21.2	27.2	32.6	37.5	41.1	43.5	44.7
72.5°	7.3	9.1	12.1	13.9	15.7	20.5	24.8	28.4	30.8	33.2	34.4
75°	4.8	6.0	8.5	9.7	10.9	14.5	17.5	20.5	22.4	24.2	24.8
77.5°	3.0	4.2	6.0	6.6	7.9	9.7	12.1	13.9	15.1	16.3	17.5
80°	1.8	2.4	3.6	4.2	4.8	6.6	7.9	9.1	10.3	11.5	12.1
82.5°	1.2	1.8	2.4	2.4	3.0	3.6	4.8	6.0	6.6	7.3	7.9
85°	0.6	0.6	1.2	1.2	1.8	1.8	2.4	3.0	3.6	4.2	4.8
87.5°	0.6	0.6	0.6	0.6	1.2	1.2	1.8	1.8	1.8	2.4	2.4
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: P252655

CATALOG NUMBER: LD6B10D010 EU6B10209030 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	427.2	427.2	427.2	427.2	427.2	427.2	427.2	427.2
2.5°	425.4	427.2	425.4	426.6	426.0	426.0	425.4	426.0
5°	427.2	429.7	427.2	429.1	427.8	427.8	427.8	428.4
7.5°	429.1	431.5	429.7	431.5	430.9	430.3	430.3	431.5
10°	430.9	432.7	431.5	433.3	432.7	432.1	432.1	433.3
12.5°	430.9	433.3	432.1	433.9	433.3	432.7	432.7	433.3
15°	429.1	432.1	430.3	432.1	431.5	430.9	430.9	432.1
17.5°	423.6	426.0	424.8	426.0	426.0	425.4	426.0	426.6
20°	416.4	418.2	417.0	418.2	418.2	417.0	417.6	418.2
22.5°	406.1	407.9	406.7	407.9	407.3	406.7	406.7	406.1
25°	393.4	395.8	394.0	395.2	394.0	392.8	392.8	393.4
27.5°	377.7	379.5	377.1	378.3	377.1	375.9	375.9	375.3
30°	357.1	357.7	355.9	357.1	355.9	355.3	354.1	354.1
32.5°	332.4	333.0	331.2	331.2	329.9	329.9	327.5	329.3
35°	303.4	304.0	303.4	302.8	300.9	300.3	299.7	299.7
37.5°	273.1	273.1	271.3	270.7	269.5	268.3	268.9	267.1
40°	242.3	241.7	239.9	240.5	239.9	238.1	237.5	236.9
42.5°	213.3	213.3	211.5	212.1	210.9	210.3	208.5	209.1
45°	187.9	187.9	186.1	186.1	185.5	183.7	184.3	183.1
47.5°	165.0	165.0	164.4	164.4	162.6	162.0	162.0	162.0
50°	145.0	145.0	145.0	145.0	144.4	143.8	143.2	143.8
52.5°	128.1	129.3	128.7	128.7	128.1	127.5	126.9	126.9
55°	113.0	113.6	113.6	114.2	113.6	113.0	113.6	113.0
57.5°	99.7	100.9	100.9	100.9	100.9	100.9	100.3	99.7
60°	88.2	88.8	88.8	89.4	89.4	89.4	88.8	88.8
62.5°	76.7	78.0	78.6	78.6	79.2	78.6	78.6	78.6
65°	67.7	68.9	69.5	68.9	69.5	69.5	68.9	68.9
67.5°	56.8	58.0	58.0	58.0	58.0	58.6	58.0	58.0
70°	45.9	47.1	46.5	47.1	47.1	47.1	47.1	47.1
72.5°	35.0	35.7	36.3	36.3	36.9	36.3	36.3	36.3
75°	25.4	26.6	26.6	26.6	26.6	27.2	27.2	27.2
77.5°	18.1	18.7	18.7	19.3	19.3	19.3	19.3	19.9
80°	12.7	12.7	13.3	13.3	13.9	13.9	13.9	13.9
82.5°	8.5	9.1	9.1	9.1	9.1	9.1	9.1	9.1
85°	4.8	5.4	5.4	5.4	5.4	6.0	6.0	6.0
87.5°	3.0	3.0	3.0	3.0	3.0	3.0	2.4	2.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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













(END OF REPORT)