

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: P252242

Luminaire Tested: **LD6B10D010 EU6B10209050 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252242
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-7)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B10D010 EU6B10209050 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 856.0 lumens
Efficiency: N/A
Efficacy: 85.2 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.18 / 1.16
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

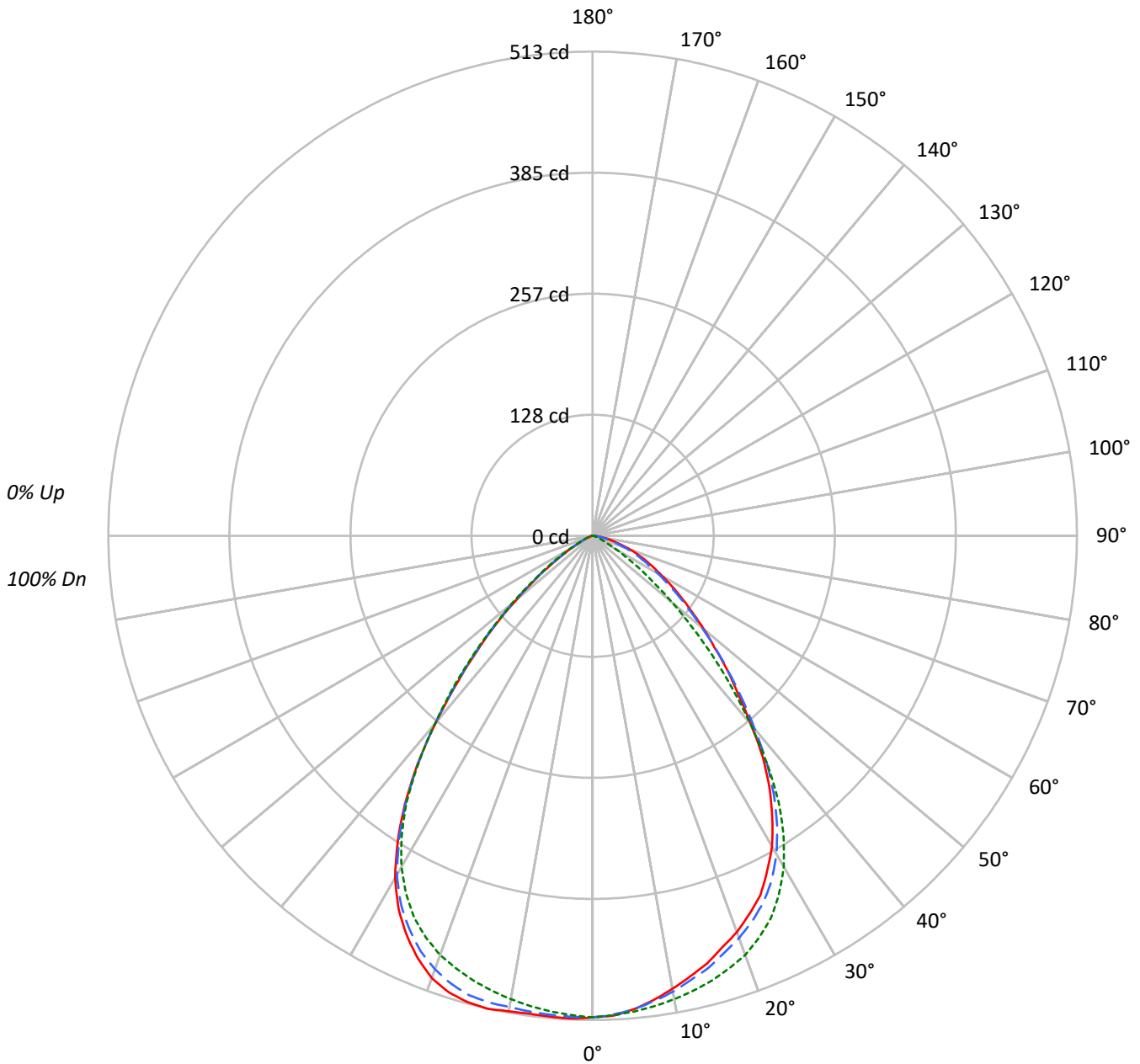
Input Watts (W): 10.05
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100								
1	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90								
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	85	82	80								
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72								
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64								
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58								
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52								
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47								
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43								
9	65	54	47	42	64	53	46	42	52	46	42	51	46	41	50	45	41	40								
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	37								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	33286	33286	33286
5°	32974	33131	33498
10°	32289	33024	33885
15°	31670	32961	34548
20°	31020	32811	34610
25°	30255	32163	33581
30°	28642	30502	31519
35°	26012	27334	27581
40°	22203	22092	21990
45°	18647	16543	16036
50°	15570	11195	10637
55°	13103	6870	6233
60°	11091	3614	3132
65°	9602	1899	1528
70°	7992	1183	820
75°	5898	781	454
80°	4621	451	225
85°	3668	449	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.1	5.6
10°-20°	137.7	16.1
20°-30°	203.3	23.8
30°-40°	209.5	24.5
40°-50°	144.7	16.9
50°-60°	71.3	8.3
60°-70°	28.9	3.4
70°-80°	10.3	1.2
80°-90°	2.1	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°	389.1	45.5
0°-40°	598.6	69.9
0°-60°	814.7	95.2
0°-90°	856.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	856.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	510	510	510	510	510	
5°	504	504	506	510	512	48
15°	469	474	488	504	512	132
25°	420	428	447	460	466	192
35°	327	335	343	345	346	202
45°	202	203	179	177	174	156
55°	115	111	60	57	55	104
65°	62	56	12	10	10	62
75°	23	20	3	2	2	26
85°	5	4	1	0	0	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	510.2	510.2	510.2	510.2	510.2	510.2	510.2	510.2	510.2	510.2	510.2
2.5°	509.0	507.1	508.4	505.9	509.0	505.9	506.5	507.1	506.5	507.1	507.8
5°	503.5	501.6	503.5	500.4	503.5	501.6	501.6	502.2	502.2	502.8	503.5
7.5°	496.1	494.2	496.1	493.0	496.7	494.8	494.8	496.1	495.4	496.1	497.3
10°	487.4	485.0	486.8	485.0	488.7	486.2	487.4	487.4	487.4	489.3	490.5
12.5°	478.2	475.7	478.2	475.1	478.8	477.0	477.6	479.4	480.0	481.3	481.9
15°	468.9	465.9	467.1	465.2	468.9	467.1	467.7	470.2	470.2	472.0	473.9
17.5°	457.2	454.8	457.2	454.8	457.9	456.6	457.9	459.7	459.7	461.5	463.4
20°	446.8	444.3	446.1	444.3	448.0	446.1	446.8	449.2	449.8	451.7	453.5
22.5°	433.8	432.0	433.2	431.4	435.1	433.8	434.4	436.9	437.5	438.7	441.8
25°	420.3	416.6	418.4	417.2	420.9	419.0	420.3	422.7	424.0	425.8	428.3
27.5°	400.5	398.7	399.9	399.9	403.0	401.2	401.8	404.2	406.1	407.9	411.0
30°	380.2	377.1	378.4	379.0	381.4	380.2	381.4	383.9	384.5	387.0	389.4
32.5°	354.3	353.1	355.6	354.3	355.6	355.6	356.2	358.0	359.3	360.5	363.6
35°	326.6	324.1	326.6	325.4	328.4	326.6	328.4	330.3	330.3	332.8	334.6
37.5°	296.4	293.3	294.6	294.6	295.8	295.2	295.2	298.2	298.9	300.7	302.6
40°	260.7	259.4	261.9	261.3	261.9	261.9	262.5	264.4	265.6	266.2	266.8
42.5°	228.6	229.2	229.8	229.8	229.8	229.8	229.8	232.3	231.7	233.5	234.2
45°	202.1	199.7	200.9	200.3	202.1	200.3	202.1	204.0	202.7	204.6	203.4
47.5°	175.0	175.0	175.0	174.4	175.6	175.0	176.2	176.9	176.9	176.9	176.2
50°	153.4	151.6	152.2	152.2	152.8	152.2	153.4	154.1	154.1	152.8	150.4
52.5°	132.5	131.9	131.9	133.1	133.1	132.5	132.5	132.5	132.5	130.6	129.4
55°	115.2	114.0	114.6	114.6	114.6	114.6	115.2	114.6	114.6	112.8	110.9
57.5°	99.8	98.6	98.6	98.6	99.2	98.6	98.6	98.6	98.0	96.1	93.7
60°	85.0	84.4	85.0	85.0	85.7	85.0	85.0	85.0	83.8	82.0	79.5
62.5°	72.7	72.7	72.7	73.3	73.3	72.7	72.7	72.1	71.5	69.0	66.6
65°	62.2	61.6	62.2	62.2	62.9	62.9	62.2	61.6	61.0	58.5	56.1
67.5°	51.8	51.1	51.8	51.8	52.4	51.8	51.8	51.8	49.9	48.7	46.2
70°	41.9	41.3	41.3	41.3	41.9	40.7	41.3	41.3	40.1	38.2	35.7
72.5°	32.0	32.0	32.0	32.0	32.0	32.0	31.4	31.4	30.2	28.3	27.1
75°	23.4	23.4	24.0	24.0	23.4	23.4	23.4	22.8	22.2	21.0	19.7
77.5°	17.3	17.3	17.3	17.3	16.6	16.6	16.6	16.0	15.4	14.8	13.6
80°	12.3	12.3	12.3	11.7	12.3	11.7	11.7	11.7	10.5	9.9	9.2
82.5°	8.6	8.0	8.0	8.0	8.0	8.0	8.0	7.4	7.4	6.8	6.2
85°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.3	3.7	3.7
87.5°	2.5	3.1	3.1	3.1	3.1	3.1	3.1	2.5	2.5	2.5	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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	510.2	510.2	510.2	510.2	510.2	510.2	510.2	510.2	510.2	510.2	510.2
2.5°	507.8	507.8	509.0	507.1	510.2	508.4	507.8	510.8	509.0	508.4	509.6
5°	503.5	504.1	504.7	503.5	506.5	504.7	504.7	507.8	506.5	505.9	507.8
7.5°	497.9	498.5	499.8	499.1	501.6	500.4	501.0	504.1	502.8	502.8	504.7
10°	491.1	492.4	493.6	493.6	496.7	495.4	495.4	499.1	497.9	498.5	501.0
12.5°	483.1	485.0	486.8	487.4	490.5	488.7	489.3	493.6	493.0	493.6	496.1
15°	474.5	477.0	478.8	478.8	482.5	480.7	482.5	486.8	485.6	488.0	491.1
17.5°	464.6	467.1	469.6	470.2	473.9	472.6	475.1	479.4	479.4	480.7	484.3
20°	455.4	458.5	459.7	461.5	465.2	464.6	465.9	470.8	470.8	472.6	476.3
22.5°	443.1	446.1	448.6	450.5	453.5	453.5	455.4	459.7	459.7	460.9	464.6
25°	429.5	433.2	435.1	436.9	440.0	439.4	441.2	444.9	445.5	446.8	450.5
27.5°	412.2	415.3	417.8	419.0	423.3	420.9	422.7	427.0	426.4	427.7	430.7
30°	390.7	393.8	396.2	396.2	399.9	399.9	401.8	403.6	403.6	404.9	407.3
32.5°	365.4	369.1	369.1	371.0	373.4	371.0	373.4	375.9	374.7	376.5	378.4
35°	336.5	338.3	338.9	338.9	340.8	340.2	339.5	341.4	340.2	343.2	345.1
37.5°	301.3	303.8	302.6	303.8	303.2	301.3	301.3	304.4	301.9	302.6	304.4
40°	267.4	267.4	266.8	263.7	264.4	262.5	261.9	262.5	260.0	259.4	261.9
42.5°	232.3	231.7	229.8	225.5	226.2	223.1	220.6	220.6	219.4	218.8	219.4
45°	200.9	199.0	196.0	191.0	189.8	187.3	182.4	181.2	179.3	179.3	179.9
47.5°	171.9	169.5	164.5	159.0	155.9	152.8	147.9	146.0	143.0	141.7	143.0
50°	147.9	143.6	137.4	129.4	126.3	122.6	117.7	114.6	111.5	110.3	109.7
52.5°	125.7	119.5	113.4	103.5	101.1	97.4	90.6	87.5	84.4	82.0	82.0
55°	106.6	101.1	92.4	83.2	79.5	75.8	69.0	64.7	61.6	60.4	59.2
57.5°	89.4	83.2	75.2	65.3	61.6	57.9	51.1	46.8	43.8	41.9	40.7
60°	75.2	68.4	60.4	51.8	47.4	43.8	37.0	32.7	29.6	27.7	26.5
62.5°	61.6	56.1	48.1	40.1	36.4	32.7	27.1	22.8	19.7	18.5	16.6
65°	51.8	46.2	38.8	32.0	29.0	25.3	20.3	16.6	14.2	12.3	11.1
67.5°	41.9	37.6	31.4	25.3	22.2	19.7	15.4	12.3	9.9	8.6	8.0
70°	33.3	29.0	24.0	19.1	17.3	14.8	11.7	8.6	7.4	6.2	5.5
72.5°	24.6	21.6	17.9	14.2	12.3	11.1	8.0	6.8	4.9	4.3	3.7
75°	17.9	15.4	12.9	9.9	8.6	8.0	6.2	4.3	3.7	3.1	2.5
77.5°	12.3	11.1	8.6	6.8	6.2	5.5	4.3	3.1	2.5	1.8	1.8
80°	8.0	6.8	5.5	4.3	4.3	3.7	2.5	1.8	1.8	1.2	1.2
82.5°	4.9	4.3	3.7	3.1	2.5	2.5	1.8	1.2	1.2	0.6	0.6
85°	3.1	2.5	1.8	1.8	1.2	1.2	1.2	0.6	0.6	0.6	0.6
87.5°	1.2	1.2	1.2	0.6	0.6	0.6	0.6	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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	510.2	510.2	510.2	510.2	510.2	510.2	510.2	510.2	510.2	510.2	510.2
2.5°	509.6	509.6	510.8	509.0	510.2	510.2	511.5	509.0	510.2	510.8	512.1
5°	507.1	507.8	509.0	508.4	509.0	509.0	510.2	507.1	509.6	509.6	511.5
7.5°	504.7	504.7	505.9	505.3	506.5	507.1	508.4	505.9	508.4	508.4	510.2
10°	501.6	501.6	503.5	502.8	504.7	505.3	507.1	504.7	507.1	507.8	509.6
12.5°	497.3	497.9	499.8	499.8	501.6	502.8	504.7	503.5	506.5	507.1	509.6
15°	492.4	493.6	496.1	495.4	497.3	499.1	501.6	499.8	504.1	505.3	507.8
17.5°	486.2	487.4	489.3	489.3	491.1	492.4	495.4	494.2	497.9	498.5	501.6
20°	477.0	478.8	481.3	480.7	482.5	483.7	486.2	485.0	488.7	489.9	493.0
22.5°	465.9	467.1	468.9	468.9	470.8	472.0	474.5	472.6	476.3	477.0	479.4
25°	451.1	452.3	453.5	454.2	456.0	456.6	457.9	456.6	459.7	460.3	463.4
27.5°	432.0	432.6	434.4	434.4	435.7	436.3	438.1	435.7	440.0	440.0	441.8
30°	409.2	408.6	411.0	409.8	411.0	411.0	412.9	411.6	414.7	413.5	415.3
32.5°	379.0	380.2	380.2	379.0	381.4	380.8	380.8	379.6	381.4	382.1	383.3
35°	343.8	345.7	345.7	346.3	346.9	345.1	345.7	342.0	345.1	345.7	346.3
37.5°	305.6	303.8	305.0	303.2	306.3	302.6	302.6	300.1	302.6	302.6	303.2
40°	261.9	261.3	262.5	261.3	260.7	260.0	258.8	257.0	259.4	258.2	260.0
42.5°	220.6	220.0	220.0	218.8	218.1	218.1	216.9	215.7	215.1	215.1	218.1
45°	178.1	179.3	178.1	177.5	178.7	177.5	178.1	175.6	176.9	175.6	176.9
47.5°	142.3	143.0	141.7	140.5	142.3	140.5	140.5	138.6	141.1	141.1	139.9
50°	110.3	109.7	108.5	109.7	109.1	109.1	109.1	107.2	108.5	106.6	107.8
52.5°	81.3	80.7	80.7	80.1	80.7	80.1	80.1	79.5	79.5	78.9	79.5
55°	59.2	58.5	57.3	57.3	57.3	57.9	57.3	56.7	56.7	56.1	56.7
57.5°	40.1	38.8	38.8	38.8	38.8	38.2	38.2	37.6	38.2	37.6	38.2
60°	25.9	25.9	24.6	24.6	24.6	24.6	24.6	24.0	24.6	24.6	24.6
62.5°	16.0	16.0	15.4	14.8	15.4	14.8	14.8	14.8	15.4	14.8	15.4
65°	10.5	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
67.5°	7.4	6.8	6.8	6.8	6.8	6.8	6.8	6.2	6.8	6.8	6.8
70°	4.9	4.9	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
72.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
75°	2.5	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
77.5°	1.8	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
80°	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
82.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
85°	0.6	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	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	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



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CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	510.2	510.2	510.2	510.2	510.2	510.2	510.2	510.2
2.5°	510.2	510.8	509.6	510.2	509.0	510.2	510.8	512.1
5°	509.0	509.6	508.4	509.6	508.4	509.6	510.2	511.5
7.5°	507.8	509.0	507.8	509.0	507.8	509.0	509.6	510.8
10°	507.8	509.6	508.4	510.2	508.4	509.6	510.8	511.5
12.5°	507.8	509.6	509.0	510.2	509.6	510.8	512.1	513.3
15°	506.5	508.4	507.1	509.0	508.4	509.0	511.5	511.5
17.5°	499.8	501.6	501.6	502.8	502.8	504.7	505.9	507.1
20°	491.1	493.0	492.4	494.2	494.2	496.1	497.3	498.5
22.5°	478.2	480.7	480.0	481.9	481.3	482.5	485.0	484.3
25°	461.5	464.6	464.0	465.2	464.6	464.6	465.9	466.5
27.5°	441.2	443.1	442.4	443.7	442.4	443.7	444.9	445.5
30°	414.7	415.9	415.3	415.9	415.3	416.6	417.2	418.4
32.5°	382.7	384.5	382.7	383.9	383.3	383.3	385.8	384.5
35°	344.5	345.1	345.7	345.7	344.5	345.1	346.3	346.3
37.5°	301.9	305.0	301.3	303.2	302.6	302.6	302.6	304.4
40°	257.6	258.2	257.0	257.0	257.0	256.3	258.8	258.2
42.5°	215.7	216.3	215.7	213.8	214.4	214.4	216.3	213.8
45°	175.0	176.2	175.6	175.6	174.4	174.4	175.0	173.8
47.5°	138.6	139.9	138.0	138.6	137.4	138.6	138.0	139.3
50°	105.4	106.6	106.0	106.6	106.6	105.4	107.2	104.8
52.5°	78.9	79.5	78.9	78.3	77.6	77.6	78.9	78.3
55°	56.1	55.5	55.5	55.5	56.1	56.1	55.5	54.8
57.5°	37.6	37.6	37.0	37.0	37.6	36.4	37.0	36.4
60°	24.0	24.0	24.0	24.0	23.4	24.0	24.0	24.0
62.5°	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8
65°	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
67.5°	6.2	6.8	6.8	6.8	6.2	6.2	6.2	6.2
70°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
72.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
75°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
77.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
80°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
82.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.6	0.6	0.6	0.6	0.6	0.0	0.0	0.0
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)