

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: P252657

Luminaire Tested: **LD6B10D010 EU6B10209040 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252657
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 EU6B10209040 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 861.0 lumens
Efficiency: N/A
Efficacy: 85.7 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

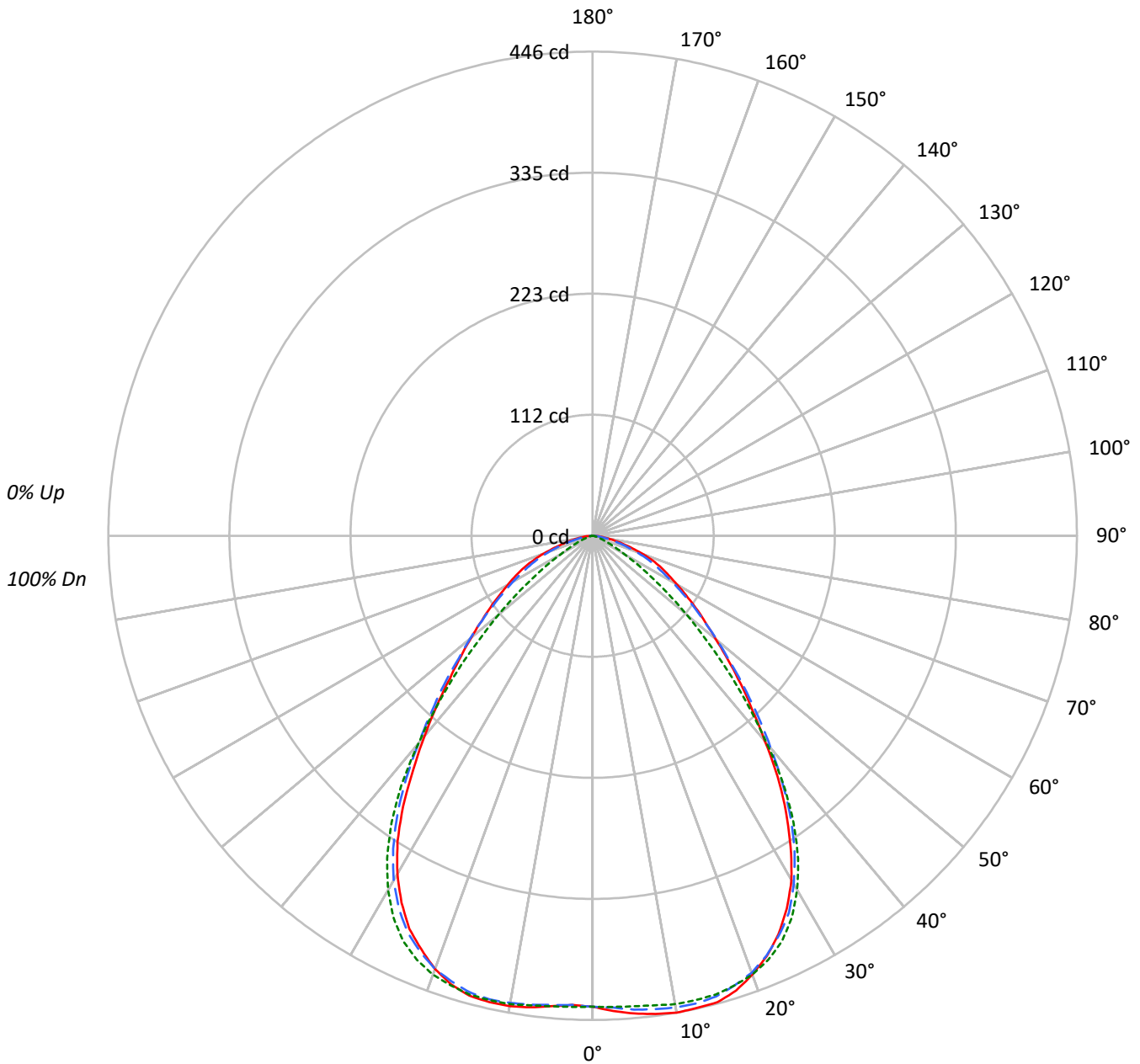
Input Watts (W): 10.05
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	28301	28301	28301
5°	28933	28488	28488
10°	29553	29023	29142
15°	30043	29550	29631
20°	29861	29861	29479
25°	29154	29679	28751
30°	27595	28378	27082
35°	24729	25701	24236
40°	21010	21266	20482
45°	17779	16248	17152
50°	15011	11459	14818
55°	13194	7393	13046
60°	11691	4397	11769
65°	10791	2655	10791
70°	9366	1526	9137
75°	7436	933	6957
80°	5523	676	5297
85°	5015	449	4566



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.8	4.9
10°-20°	123.6	14.4
20°-30°	185.9	21.6
30°-40°	195.4	22.7
40°-50°	146.0	17.0
50°-60°	90.9	10.6
60°-70°	51.7	6.0
70°-80°	21.3	2.5
80°-90°	4.4	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°	351.3	40.8
0°-40°	546.7	63.5
0°-60°	783.6	91.0
0°-90°	861.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	861.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	434	434	434	434	434	
5°	442	438	435	434	435	42
15°	445	439	438	436	439	125
25°	405	406	412	403	399	185
35°	310	318	323	314	304	193
45°	193	197	176	193	186	149
55°	116	114	65	112	115	104
65°	70	63	17	63	70	69
75°	30	23	4	23	28	32
85°	7	4	1	4	6	7
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°	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8
2.5°	438.1	437.5	438.1	436.9	436.2	436.2	436.9	435.6	435.0	435.6	435.0
5°	441.8	440.5	441.2	440.5	439.3	439.3	439.9	438.1	438.1	438.7	438.1
7.5°	444.2	444.2	444.2	443.0	442.4	441.8	443.0	441.2	440.5	440.5	439.9
10°	446.1	445.4	446.1	444.8	443.6	443.0	444.2	443.0	441.8	443.0	441.2
12.5°	445.4	445.4	445.4	444.8	443.6	443.0	444.2	442.4	441.8	442.4	441.2
15°	444.8	443.0	443.6	443.0	441.2	441.2	441.8	439.9	438.7	440.5	439.3
17.5°	439.3	438.1	438.7	437.5	436.2	435.6	436.2	435.6	434.4	435.6	434.4
20°	430.1	430.1	430.7	429.5	428.3	427.7	428.9	427.7	426.4	428.3	428.3
22.5°	419.1	419.1	419.1	418.5	417.8	417.8	417.8	417.2	416.6	417.8	418.5
25°	405.0	404.3	405.0	405.6	405.0	404.3	405.0	405.0	403.7	406.2	406.2
27.5°	387.2	387.2	388.4	387.8	387.8	387.2	388.4	388.4	387.8	389.6	391.5
30°	366.3	365.1	366.3	366.3	366.9	366.9	367.5	367.5	367.5	369.4	370.6
32.5°	339.3	339.9	341.8	341.1	340.5	342.4	342.4	343.6	344.2	345.4	346.1
35°	310.5	311.1	311.1	311.7	312.9	311.7	314.8	314.1	314.8	317.2	318.4
37.5°	279.8	277.9	281.0	279.8	280.4	280.4	281.6	282.2	284.1	287.1	287.1
40°	246.7	247.3	248.5	249.1	249.7	249.7	249.7	251.6	252.2	255.9	255.2
42.5°	217.8	217.8	219.0	219.7	219.7	219.7	219.7	221.5	222.7	224.0	225.2
45°	192.7	190.8	192.0	192.0	193.3	192.7	193.9	195.1	195.7	197.6	197.0
47.5°	168.7	168.1	168.7	169.3	168.7	169.3	170.0	170.6	171.2	171.2	171.2
50°	147.9	147.9	148.5	149.1	149.1	149.1	149.1	149.7	149.7	150.9	149.7
52.5°	130.7	131.3	131.3	130.7	131.3	131.3	131.9	131.9	131.3	131.3	129.5
55°	116.0	115.4	116.0	115.4	116.0	116.0	115.4	115.4	114.7	114.1	113.5
57.5°	101.9	101.9	101.9	101.9	101.2	101.9	101.2	100.6	100.6	99.4	97.6
60°	89.6	89.6	89.6	89.6	89.6	89.0	89.6	89.0	87.7	86.5	84.1
62.5°	79.1	78.5	79.1	78.5	78.5	77.9	77.9	77.3	76.1	74.9	72.4
65°	69.9	70.6	69.9	69.9	69.3	68.7	68.7	68.1	66.3	65.0	62.6
67.5°	60.1	59.5	59.5	59.5	58.9	58.9	58.9	57.7	56.4	54.6	52.2
70°	49.1	49.1	49.1	48.5	48.5	47.9	47.9	47.2	46.0	44.8	41.7
72.5°	38.7	38.7	38.7	37.4	38.0	37.4	37.4	36.2	35.6	33.7	31.9
75°	29.5	29.5	28.8	28.8	28.2	27.6	27.6	27.0	26.4	25.2	23.3
77.5°	21.5	21.5	21.5	20.9	20.2	19.6	19.6	19.0	18.4	17.8	16.6
80°	14.7	14.7	14.7	14.7	14.1	13.5	13.5	12.9	12.9	12.3	11.0
82.5°	9.8	9.8	9.8	9.8	9.2	9.2	9.2	8.6	8.0	8.0	6.7
85°	6.7	6.7	6.1	6.1	6.1	6.1	5.5	5.5	4.9	4.3	4.3
87.5°	3.7	3.7	3.7	3.7	3.1	3.1	3.1	3.1	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°	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8
2.5°	436.9	436.9	436.2	434.4	435.0	434.4	435.0	434.4	432.6	434.4	432.6
5°	439.3	439.9	438.7	436.2	436.9	436.2	436.2	435.6	433.8	435.0	433.8
7.5°	441.8	441.2	440.5	438.1	438.7	438.1	438.1	436.9	435.0	436.2	434.4
10°	443.0	443.0	441.8	439.3	439.3	438.7	439.3	438.7	436.2	438.1	436.9
12.5°	443.0	442.4	442.4	439.3	439.9	439.3	439.9	438.7	436.9	438.1	437.5
15°	441.2	441.2	440.5	437.5	438.1	438.1	438.7	437.5	435.6	437.5	436.2
17.5°	437.5	437.5	436.9	434.4	435.6	435.6	436.2	435.0	433.2	434.4	434.4
20°	430.1	430.7	430.7	428.9	430.1	430.1	430.7	430.1	429.5	430.1	428.9
22.5°	421.5	422.7	422.7	420.9	422.1	422.1	424.0	423.4	422.1	422.7	422.1
25°	408.6	409.9	411.1	409.9	411.1	411.1	412.9	412.3	411.1	412.3	410.5
27.5°	393.9	394.5	395.7	394.5	396.4	395.7	397.6	397.0	395.1	397.0	396.4
30°	373.0	375.5	377.3	375.5	377.3	377.3	378.6	378.0	377.3	376.7	376.7
32.5°	349.7	352.2	352.2	351.6	352.8	352.8	353.4	352.2	351.6	352.2	352.8
35°	320.9	322.1	323.3	322.7	323.3	324.0	323.3	324.0	322.1	322.7	322.7
37.5°	289.6	290.8	290.8	289.0	290.2	290.2	289.0	289.0	287.8	289.0	286.5
40°	256.5	255.2	255.9	254.6	253.4	253.4	252.8	250.3	249.1	249.7	250.3
42.5°	224.0	224.0	222.1	219.0	216.0	216.0	214.1	212.9	210.5	211.7	211.1
45°	196.3	193.3	190.8	185.9	184.1	182.8	179.8	176.7	175.5	176.1	175.5
47.5°	170.0	167.5	161.4	154.6	152.8	150.9	147.3	143.6	142.3	141.1	141.1
50°	147.9	143.6	136.8	129.5	126.4	123.3	118.4	114.7	112.3	112.9	112.9
52.5°	127.6	122.7	114.7	105.5	101.9	98.2	93.9	89.6	87.7	87.1	87.1
55°	109.8	104.3	96.3	85.9	82.8	78.5	73.0	68.1	65.7	65.0	66.3
57.5°	93.9	89.0	79.8	69.3	65.7	61.4	55.8	51.5	48.5	47.9	48.5
60°	81.0	74.2	66.3	56.4	51.5	47.9	41.7	38.0	35.0	33.7	34.4
62.5°	68.1	62.0	54.0	44.2	40.5	36.8	31.3	27.0	24.5	23.9	24.5
65°	58.3	52.2	44.8	36.2	32.5	28.8	23.9	19.6	17.8	17.2	17.8
67.5°	48.5	42.9	36.8	28.8	25.8	22.7	17.8	14.7	12.3	11.7	12.3
70°	39.3	34.4	28.2	22.7	19.6	17.2	13.5	10.4	8.6	8.0	8.6
72.5°	29.5	25.8	21.5	16.6	14.7	12.9	9.8	7.4	6.1	5.5	6.1
75°	21.5	18.4	15.3	11.7	10.4	9.2	6.7	4.9	4.3	3.7	4.3
77.5°	14.7	12.9	10.4	8.0	6.7	6.1	4.3	3.7	3.1	2.5	2.5
80°	9.8	8.6	6.7	5.5	4.9	4.3	3.1	2.5	1.8	1.8	1.8
82.5°	6.1	4.9	4.3	3.1	2.5	2.5	1.8	1.2	1.2	1.2	1.2
85°	3.7	3.1	2.5	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8
2.5°	433.8	432.6	432.6	433.2	433.8	434.4	433.2	432.6	432.6	434.4	433.2
5°	433.8	433.2	433.2	433.2	434.4	435.0	433.8	433.2	433.8	435.6	435.0
7.5°	435.6	434.4	435.0	435.0	435.6	436.9	435.6	435.0	435.6	437.5	436.2
10°	436.9	435.6	436.2	435.6	437.5	438.1	436.9	436.2	436.9	439.3	438.7
12.5°	437.5	436.9	436.9	436.2	438.1	438.7	437.5	436.9	437.5	439.3	438.7
15°	436.2	435.6	435.6	435.6	436.9	438.1	436.2	435.6	435.6	437.5	436.9
17.5°	433.8	432.6	432.6	432.6	433.2	433.8	431.9	431.3	430.7	432.6	431.9
20°	429.5	428.3	427.0	427.0	427.7	427.7	426.4	424.6	424.6	425.2	424.0
22.5°	421.5	420.9	419.7	419.1	420.3	419.7	417.2	415.4	414.8	415.4	414.2
25°	410.5	409.2	408.6	408.0	408.6	408.0	405.6	403.1	403.1	403.1	401.3
27.5°	395.1	393.9	393.3	393.3	393.9	392.7	390.2	387.8	386.5	386.5	384.7
30°	375.5	375.5	374.9	374.3	373.7	373.7	370.0	367.5	366.3	366.9	365.7
32.5°	351.6	351.0	350.3	348.5	349.1	348.5	345.4	343.6	341.8	340.5	339.9
35°	320.9	320.9	320.3	320.3	320.3	319.7	316.6	314.8	313.5	312.9	311.1
37.5°	287.1	286.5	285.9	285.9	285.9	285.9	284.1	282.2	282.2	281.6	280.4
40°	249.1	249.7	250.3	249.7	251.6	253.4	250.9	249.7	249.1	250.9	248.5
42.5°	212.3	211.7	214.7	215.4	215.4	218.4	219.0	219.7	219.0	220.3	220.3
45°	176.7	176.1	179.2	180.4	183.5	187.1	189.0	192.0	193.3	194.5	193.3
47.5°	143.0	145.4	147.9	150.9	153.4	159.5	163.2	166.3	167.5	169.3	169.3
50°	114.7	117.2	121.5	123.9	127.0	134.4	140.5	144.8	147.3	149.1	148.5
52.5°	88.4	92.6	98.2	100.6	104.9	113.5	120.3	125.2	128.2	130.1	130.7
55°	68.1	71.8	77.3	81.0	85.3	94.5	103.1	108.6	111.7	114.1	115.4
57.5°	50.3	54.6	60.7	63.8	68.7	79.1	86.5	93.3	96.9	100.0	100.6
60°	36.8	41.1	46.6	50.3	55.2	65.7	74.2	80.4	84.7	87.1	88.4
62.5°	26.4	30.7	36.2	39.9	44.2	53.4	62.0	68.1	72.4	75.5	77.3
65°	19.0	23.3	28.8	31.9	35.6	44.2	52.2	58.3	62.6	66.3	67.5
67.5°	14.1	17.2	22.1	25.2	28.8	35.6	42.3	47.9	52.2	55.2	56.4
70°	10.4	12.9	17.2	19.0	21.5	27.6	33.1	38.0	41.7	44.2	45.4
72.5°	7.4	9.2	12.3	14.1	16.0	20.9	25.2	28.8	31.3	33.7	35.0
75°	4.9	6.1	8.6	9.8	11.0	14.7	17.8	20.9	22.7	24.5	25.2
77.5°	3.1	4.3	6.1	6.7	8.0	9.8	12.3	14.1	15.3	16.6	17.8
80°	1.8	2.5	3.7	4.3	4.9	6.7	8.0	9.2	10.4	11.7	12.3
82.5°	1.2	1.8	2.5	2.5	3.1	3.7	4.9	6.1	6.7	7.4	8.0
85°	0.6	0.6	1.2	1.2	1.8	1.8	2.5	3.1	3.7	4.3	4.9
87.5°	0.6	0.6	0.6	0.6	1.2	1.2	1.8	1.8	1.8	2.5	2.5
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°	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8
2.5°	431.9	433.8	431.9	433.2	432.6	432.6	431.9	432.6
5°	433.8	436.2	433.8	435.6	434.4	434.4	434.4	435.0
7.5°	435.6	438.1	436.2	438.1	437.5	436.9	436.9	438.1
10°	437.5	439.3	438.1	439.9	439.3	438.7	438.7	439.9
12.5°	437.5	439.9	438.7	440.5	439.9	439.3	439.3	439.9
15°	435.6	438.7	436.9	438.7	438.1	437.5	437.5	438.7
17.5°	430.1	432.6	431.3	432.6	432.6	431.9	432.6	433.2
20°	422.7	424.6	423.4	424.6	424.6	423.4	424.0	424.6
22.5°	412.3	414.2	412.9	414.2	413.5	412.9	412.9	412.3
25°	399.4	401.9	400.0	401.3	400.0	398.8	398.8	399.4
27.5°	383.5	385.3	382.9	384.1	382.9	381.6	381.6	381.0
30°	362.6	363.2	361.4	362.6	361.4	360.8	359.5	359.5
32.5°	337.5	338.1	336.2	336.2	335.0	335.0	332.6	334.4
35°	308.0	308.6	308.0	307.4	305.6	304.9	304.3	304.3
37.5°	277.3	277.3	275.5	274.9	273.6	272.4	273.0	271.2
40°	246.0	245.4	243.6	244.2	243.6	241.7	241.1	240.5
42.5°	216.6	216.6	214.7	215.4	214.1	213.5	211.7	212.3
45°	190.8	190.8	189.0	189.0	188.4	186.5	187.1	185.9
47.5°	167.5	167.5	166.9	166.9	165.0	164.4	164.4	164.4
50°	147.3	147.3	147.3	147.3	146.6	146.0	145.4	146.0
52.5°	130.1	131.3	130.7	130.7	130.1	129.5	128.8	128.8
55°	114.7	115.4	115.4	116.0	115.4	114.7	115.4	114.7
57.5°	101.2	102.5	102.5	102.5	102.5	102.5	101.9	101.2
60°	89.6	90.2	90.2	90.8	90.8	90.8	90.2	90.2
62.5°	77.9	79.1	79.8	79.8	80.4	79.8	79.8	79.8
65°	68.7	69.9	70.6	69.9	70.6	70.6	69.9	69.9
67.5°	57.7	58.9	58.9	58.9	58.9	59.5	58.9	58.9
70°	46.6	47.9	47.2	47.9	47.9	47.9	47.9	47.9
72.5°	35.6	36.2	36.8	36.8	37.4	36.8	36.8	36.8
75°	25.8	27.0	27.0	27.0	27.0	27.6	27.6	27.6
77.5°	18.4	19.0	19.0	19.6	19.6	19.6	19.6	20.2
80°	12.9	12.9	13.5	13.5	14.1	14.1	14.1	14.1
82.5°	8.6	9.2	9.2	9.2	9.2	9.2	9.2	9.2
85°	4.9	5.5	5.5	5.5	5.5	6.1	6.1	6.1
87.5°	3.1	3.1	3.1	3.1	3.1	3.1	2.5	2.5
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)