

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: P252680

Luminaire Tested: **LD6B20D010 EU6B10209027 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252680
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: LD6B20D010 EU6B10209027 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1562.0 lumens
Efficiency: N/A
Efficacy: 75.1 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

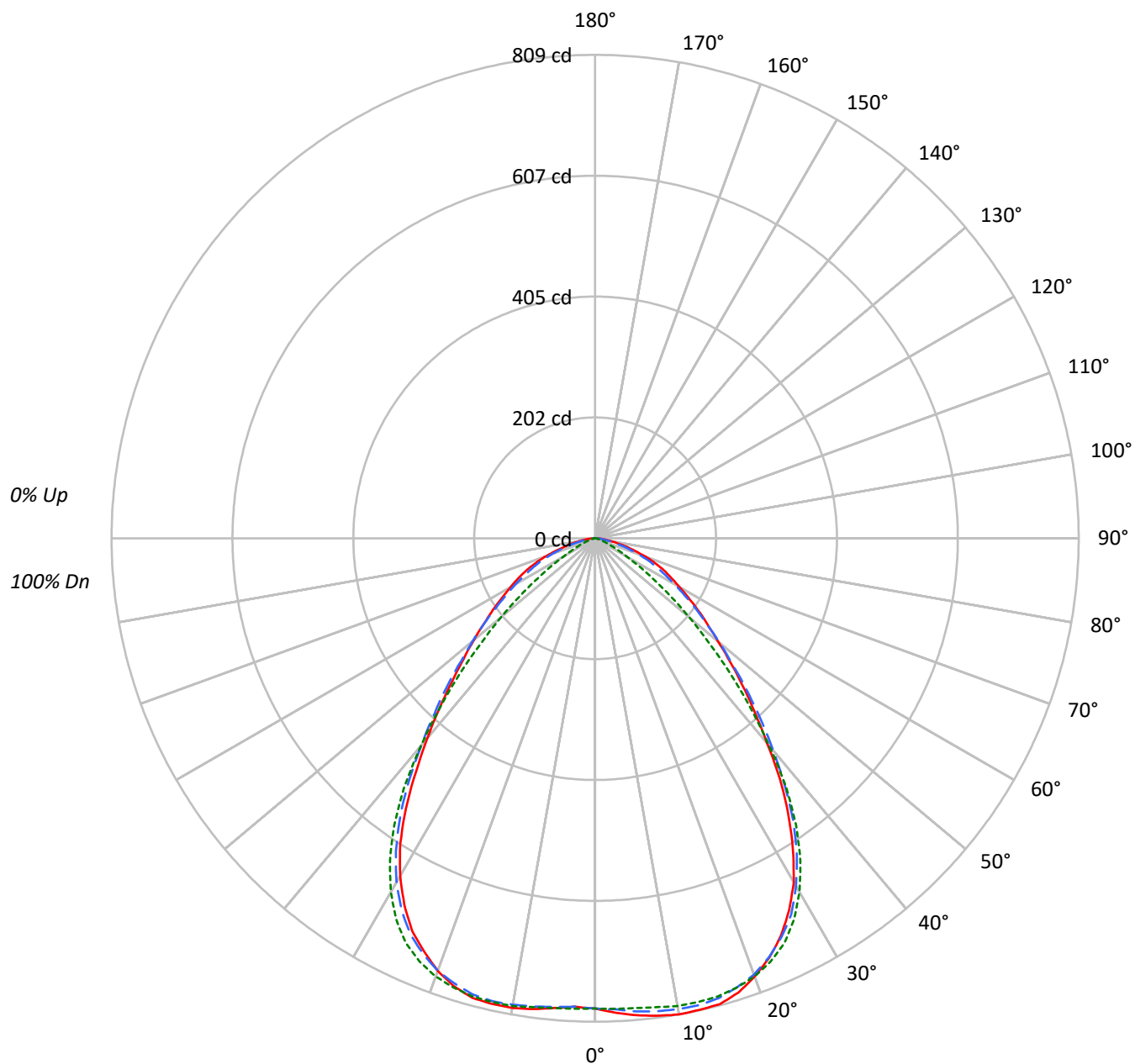
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	51344	51344	51344
5°	52484	51685	51685
10°	53607	52653	52872
15°	54506	53601	53757
20°	54174	54174	53480
25°	52887	53845	52160
30°	50059	51483	49140
35°	44856	46632	43972
40°	38112	38580	37158
45°	32246	29478	31121
50°	27231	20786	26886
55°	23932	13422	23681
60°	21203	7985	21347
65°	19590	4816	19590
70°	16977	2766	16557
75°	13461	1689	12629
80°	10031	1240	9618
85°	9132	823	8309



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.8	4.9
10°-20°	224.2	14.4
20°-30°	337.2	21.6
30°-40°	354.6	22.7
40°-50°	264.9	17.0
50°-60°	164.9	10.6
60°-70°	93.8	6.0
70°-80°	38.6	2.5
80°-90°	8.0	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°	637.2	40.8
0°-40°	991.8	63.5
0°-60°	1421.6	91.0
0°-90°	1562.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1562.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	787	787	787	787	787	
5°	801	795	789	787	789	77
15°	807	797	794	790	796	227
25°	735	737	748	731	725	336
35°	563	578	586	569	552	350
45°	350	357	320	351	337	271
55°	210	206	118	203	208	189
65°	127	114	31	114	127	125
75°	53	42	7	41	50	58
85°	12	8	1	7	11	14
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°	787.0	787.0	787.0	787.0	787.0	787.0	787.0	787.0	787.0	787.0	787.0
2.5°	794.8	793.6	794.8	792.5	791.4	791.4	792.5	790.3	789.2	790.3	789.2
5°	801.4	799.2	800.3	799.2	797.0	797.0	798.1	794.8	794.8	795.9	794.8
7.5°	805.9	805.9	805.9	803.7	802.6	801.4	803.7	800.3	799.2	799.2	798.1
10°	809.2	808.1	809.2	807.0	804.8	803.7	805.9	803.7	801.4	803.7	800.3
12.5°	808.1	808.1	808.1	807.0	804.8	803.7	805.9	802.6	801.4	802.6	800.3
15°	807.0	803.7	804.8	803.7	800.3	800.3	801.4	798.1	795.9	799.2	797.0
17.5°	797.0	794.8	795.9	793.6	791.4	790.3	791.4	790.3	788.1	790.3	788.1
20°	780.3	780.3	781.4	779.2	777.0	775.8	778.1	775.8	773.6	777.0	777.0
22.5°	760.3	760.3	760.3	759.1	758.0	758.0	758.0	756.9	755.8	758.0	759.1
25°	734.7	733.5	734.7	735.8	734.7	733.5	734.7	734.7	732.4	736.9	736.9
27.5°	702.4	702.4	704.6	703.5	703.5	702.4	704.6	704.6	703.5	706.8	710.2
30°	664.5	662.3	664.5	664.5	665.6	665.6	666.8	666.8	666.8	670.1	672.3
32.5°	615.6	616.7	620.0	618.9	617.8	621.1	621.1	623.3	624.5	626.7	627.8
35°	563.2	564.3	564.3	565.5	567.7	565.5	571.0	569.9	571.0	575.5	577.7
37.5°	507.6	504.2	509.8	507.6	508.7	508.7	510.9	512.0	515.4	520.9	520.9
40°	447.5	448.6	450.8	451.9	453.0	453.0	453.0	456.4	457.5	464.2	463.1
42.5°	395.2	395.2	397.4	398.5	398.5	398.5	398.5	401.8	404.1	406.3	408.5
45°	349.5	346.2	348.4	348.4	350.6	349.5	351.7	354.0	355.1	358.4	357.3
47.5°	306.1	305.0	306.1	307.2	306.1	307.2	308.3	309.4	310.6	310.6	310.6
50°	268.3	268.3	269.4	270.5	270.5	270.5	270.5	271.6	271.6	273.8	271.6
52.5°	237.1	238.2	238.2	237.1	238.2	238.2	239.3	239.3	238.2	238.2	234.9
55°	210.4	209.3	210.4	209.3	210.4	210.4	209.3	209.3	208.2	207.0	205.9
57.5°	184.8	184.8	184.8	184.8	183.7	184.8	183.7	182.6	182.6	180.3	177.0
60°	162.5	162.5	162.5	162.5	162.5	161.4	162.5	161.4	159.2	156.9	152.5
62.5°	143.6	142.5	143.6	142.5	142.5	141.4	141.4	140.3	138.0	135.8	131.3
65°	126.9	128.0	126.9	126.9	125.8	124.7	124.7	123.6	120.2	118.0	113.5
67.5°	109.1	108.0	108.0	108.0	106.9	106.9	106.9	104.6	102.4	99.1	94.6
70°	89.0	89.0	89.0	87.9	87.9	86.8	86.8	85.7	83.5	81.3	75.7
72.5°	70.1	70.1	70.1	67.9	69.0	67.9	67.9	65.7	64.6	61.2	57.9
75°	53.4	53.4	52.3	52.3	51.2	50.1	50.1	49.0	47.9	45.6	42.3
77.5°	39.0	39.0	39.0	37.8	36.7	35.6	35.6	34.5	33.4	32.3	30.1
80°	26.7	26.7	26.7	26.7	25.6	24.5	24.5	23.4	23.4	22.3	20.0
82.5°	17.8	17.8	17.8	17.8	16.7	16.7	16.7	15.6	14.5	14.5	12.2
85°	12.2	12.2	11.1	11.1	11.1	11.1	10.0	10.0	8.9	7.8	7.8
87.5°	6.7	6.7	6.7	6.7	5.6	5.6	5.6	5.6	4.5	4.5	3.3
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°	787.0	787.0	787.0	787.0	787.0	787.0	787.0	787.0	787.0	787.0	787.0
2.5°	792.5	792.5	791.4	788.1	789.2	788.1	789.2	788.1	784.7	788.1	784.7
5°	797.0	798.1	795.9	791.4	792.5	791.4	791.4	790.3	787.0	789.2	787.0
7.5°	801.4	800.3	799.2	794.8	795.9	794.8	794.8	792.5	789.2	791.4	788.1
10°	803.7	803.7	801.4	797.0	797.0	795.9	797.0	795.9	791.4	794.8	792.5
12.5°	803.7	802.6	802.6	797.0	798.1	797.0	798.1	795.9	792.5	794.8	793.6
15°	800.3	800.3	799.2	793.6	794.8	794.8	795.9	793.6	790.3	793.6	791.4
17.5°	793.6	793.6	792.5	788.1	790.3	790.3	791.4	789.2	785.9	788.1	788.1
20°	780.3	781.4	781.4	778.1	780.3	780.3	781.4	780.3	779.2	780.3	778.1
22.5°	764.7	766.9	766.9	763.6	765.8	765.8	769.2	768.0	765.8	766.9	765.8
25°	741.3	743.6	745.8	743.6	745.8	745.8	749.1	748.0	745.8	748.0	744.7
27.5°	714.6	715.7	718.0	715.7	719.1	718.0	721.3	720.2	716.8	720.2	719.1
30°	676.8	681.2	684.6	681.2	684.6	684.6	686.8	685.7	684.6	683.4	683.4
32.5°	634.5	638.9	638.9	637.8	640.0	640.0	641.2	638.9	637.8	638.9	640.0
35°	582.2	584.4	586.6	585.5	586.6	587.7	586.6	587.7	584.4	585.5	585.5
37.5°	525.4	527.6	527.6	524.3	526.5	526.5	524.3	524.3	522.0	524.3	519.8
40°	465.3	463.1	464.2	461.9	459.7	459.7	458.6	454.1	451.9	453.0	454.1
42.5°	406.3	406.3	402.9	397.4	391.8	391.8	388.5	386.2	381.8	384.0	382.9
45°	356.2	350.6	346.2	337.3	333.9	331.7	326.1	320.6	318.3	319.5	318.3
47.5°	308.3	303.9	292.7	280.5	277.2	273.8	267.1	260.5	258.2	256.0	256.0
50°	268.3	260.5	248.2	234.9	229.3	223.7	214.8	208.2	203.7	204.8	204.8
52.5°	231.5	222.6	208.2	191.5	184.8	178.1	170.3	162.5	159.2	158.1	158.1
55°	199.2	189.2	174.8	155.8	150.3	142.5	132.5	123.6	119.1	118.0	120.2
57.5°	170.3	161.4	144.7	125.8	119.1	111.3	101.3	93.5	87.9	86.8	87.9
60°	146.9	134.7	120.2	102.4	93.5	86.8	75.7	69.0	63.4	61.2	62.3
62.5°	123.6	112.4	98.0	80.1	73.5	66.8	56.8	49.0	44.5	43.4	44.5
65°	105.7	94.6	81.3	65.7	59.0	52.3	43.4	35.6	32.3	31.2	32.3
67.5°	87.9	77.9	66.8	52.3	46.8	41.2	32.3	26.7	22.3	21.1	22.3
70°	71.2	62.3	51.2	41.2	35.6	31.2	24.5	18.9	15.6	14.5	15.6
72.5°	53.4	46.8	39.0	30.1	26.7	23.4	17.8	13.4	11.1	10.0	11.1
75°	39.0	33.4	27.8	21.1	18.9	16.7	12.2	8.9	7.8	6.7	7.8
77.5°	26.7	23.4	18.9	14.5	12.2	11.1	7.8	6.7	5.6	4.5	4.5
80°	17.8	15.6	12.2	10.0	8.9	7.8	5.6	4.5	3.3	3.3	3.3
82.5°	11.1	8.9	7.8	5.6	4.5	4.5	3.3	2.2	2.2	2.2	2.2
85°	6.7	5.6	4.5	3.3	2.2	2.2	1.1	1.1	1.1	1.1	1.1
87.5°	3.3	2.2	2.2	1.1	1.1	1.1	1.1	1.1	0.0	0.0	1.1
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°	787.0	787.0	787.0	787.0	787.0	787.0	787.0	787.0	787.0	787.0	787.0
2.5°	787.0	784.7	784.7	785.9	787.0	788.1	785.9	784.7	784.7	788.1	785.9
5°	787.0	785.9	785.9	785.9	788.1	789.2	787.0	785.9	787.0	790.3	789.2
7.5°	790.3	788.1	789.2	789.2	790.3	792.5	790.3	789.2	790.3	793.6	791.4
10°	792.5	790.3	791.4	790.3	793.6	794.8	792.5	791.4	792.5	797.0	795.9
12.5°	793.6	792.5	792.5	791.4	794.8	795.9	793.6	792.5	793.6	797.0	795.9
15°	791.4	790.3	790.3	790.3	792.5	794.8	791.4	790.3	790.3	793.6	792.5
17.5°	787.0	784.7	784.7	784.7	785.9	787.0	783.6	782.5	781.4	784.7	783.6
20°	779.2	777.0	774.7	774.7	775.8	775.8	773.6	770.3	770.3	771.4	769.2
22.5°	764.7	763.6	761.4	760.3	762.5	761.4	756.9	753.6	752.5	753.6	751.3
25°	744.7	742.4	741.3	740.2	741.3	740.2	735.8	731.3	731.3	731.3	728.0
27.5°	716.8	714.6	713.5	713.5	714.6	712.4	707.9	703.5	701.3	701.3	697.9
30°	681.2	681.2	680.1	679.0	677.9	677.9	671.2	666.8	664.5	665.6	663.4
32.5°	637.8	636.7	635.6	632.2	633.4	632.2	626.7	623.3	620.0	617.8	616.7
35°	582.2	582.2	581.0	581.0	581.0	579.9	574.4	571.0	568.8	567.7	564.3
37.5°	520.9	519.8	518.7	518.7	518.7	518.7	515.4	512.0	512.0	510.9	508.7
40°	451.9	453.0	454.1	453.0	456.4	459.7	455.3	453.0	451.9	455.3	450.8
42.5°	385.1	384.0	389.6	390.7	390.7	396.3	397.4	398.5	397.4	399.6	399.6
45°	320.6	319.5	325.0	327.3	332.8	339.5	342.8	348.4	350.6	352.9	350.6
47.5°	259.4	263.8	268.3	273.8	278.3	289.4	296.1	301.7	303.9	307.2	307.2
50°	208.2	212.6	220.4	224.8	230.4	243.8	254.9	262.7	267.1	270.5	269.4
52.5°	160.3	168.1	178.1	182.6	190.3	205.9	218.2	227.1	232.6	236.0	237.1
55°	123.6	130.2	140.3	146.9	154.7	171.4	187.0	197.0	202.6	207.0	209.3
57.5°	91.3	99.1	110.2	115.8	124.7	143.6	156.9	169.2	175.9	181.4	182.6
60°	66.8	74.6	84.6	91.3	100.2	119.1	134.7	145.8	153.6	158.1	160.3
62.5°	47.9	55.7	65.7	72.4	80.1	96.8	112.4	123.6	131.3	136.9	140.3
65°	34.5	42.3	52.3	57.9	64.6	80.1	94.6	105.7	113.5	120.2	122.4
67.5°	25.6	31.2	40.1	45.6	52.3	64.6	76.8	86.8	94.6	100.2	102.4
70°	18.9	23.4	31.2	34.5	39.0	50.1	60.1	69.0	75.7	80.1	82.4
72.5°	13.4	16.7	22.3	25.6	28.9	37.8	45.6	52.3	56.8	61.2	63.4
75°	8.9	11.1	15.6	17.8	20.0	26.7	32.3	37.8	41.2	44.5	45.6
77.5°	5.6	7.8	11.1	12.2	14.5	17.8	22.3	25.6	27.8	30.1	32.3
80°	3.3	4.5	6.7	7.8	8.9	12.2	14.5	16.7	18.9	21.1	22.3
82.5°	2.2	3.3	4.5	4.5	5.6	6.7	8.9	11.1	12.2	13.4	14.5
85°	1.1	1.1	2.2	2.2	3.3	3.3	4.5	5.6	6.7	7.8	8.9
87.5°	1.1	1.1	1.1	1.1	2.2	2.2	3.3	3.3	3.3	4.5	4.5
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°	787.0	787.0	787.0	787.0	787.0	787.0	787.0	787.0
2.5°	783.6	787.0	783.6	785.9	784.7	784.7	783.6	784.7
5°	787.0	791.4	787.0	790.3	788.1	788.1	788.1	789.2
7.5°	790.3	794.8	791.4	794.8	793.6	792.5	792.5	794.8
10°	793.6	797.0	794.8	798.1	797.0	795.9	795.9	798.1
12.5°	793.6	798.1	795.9	799.2	798.1	797.0	797.0	798.1
15°	790.3	795.9	792.5	795.9	794.8	793.6	793.6	795.9
17.5°	780.3	784.7	782.5	784.7	784.7	783.6	784.7	785.9
20°	766.9	770.3	768.0	770.3	770.3	768.0	769.2	770.3
22.5°	748.0	751.3	749.1	751.3	750.2	749.1	749.1	748.0
25°	724.6	729.1	725.7	728.0	725.7	723.5	723.5	724.6
27.5°	695.7	699.0	694.6	696.8	694.6	692.4	692.4	691.2
30°	657.8	659.0	655.6	657.8	655.6	654.5	652.3	652.3
32.5°	612.2	613.3	610.0	610.0	607.8	607.8	603.3	606.6
35°	558.8	559.9	558.8	557.7	554.3	553.2	552.1	552.1
37.5°	503.1	503.1	499.8	498.7	496.4	494.2	495.3	492.0
40°	446.4	445.2	441.9	443.0	441.9	438.6	437.5	436.3
42.5°	392.9	392.9	389.6	390.7	388.5	387.4	384.0	385.1
45°	346.2	346.2	342.8	342.8	341.7	338.4	339.5	337.3
47.5°	303.9	303.9	302.8	302.8	299.4	298.3	298.3	298.3
50°	267.1	267.1	267.1	267.1	266.0	264.9	263.8	264.9
52.5°	236.0	238.2	237.1	237.1	236.0	234.9	233.8	233.8
55°	208.2	209.3	209.3	210.4	209.3	208.2	209.3	208.2
57.5°	183.7	185.9	185.9	185.9	185.9	185.9	184.8	183.7
60°	162.5	163.6	163.6	164.7	164.7	164.7	163.6	163.6
62.5°	141.4	143.6	144.7	144.7	145.8	144.7	144.7	144.7
65°	124.7	126.9	128.0	126.9	128.0	128.0	126.9	126.9
67.5°	104.6	106.9	106.9	106.9	106.9	108.0	106.9	106.9
70°	84.6	86.8	85.7	86.8	86.8	86.8	86.8	86.8
72.5°	64.6	65.7	66.8	66.8	67.9	66.8	66.8	66.8
75°	46.8	49.0	49.0	49.0	49.0	50.1	50.1	50.1
77.5°	33.4	34.5	34.5	35.6	35.6	35.6	35.6	36.7
80°	23.4	23.4	24.5	24.5	25.6	25.6	25.6	25.6
82.5°	15.6	16.7	16.7	16.7	16.7	16.7	16.7	16.7
85°	8.9	10.0	10.0	10.0	10.0	11.1	11.1	11.1
87.5°	5.6	5.6	5.6	5.6	5.6	5.6	4.5	4.5
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)