

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: P252267

Luminaire Tested: **LD6B20D010 EU6B10209040 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252267
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: LD6B20D010 EU6B10209040 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE 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: 1634.0 lumens
Efficiency: N/A
Efficacy: 78.6 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

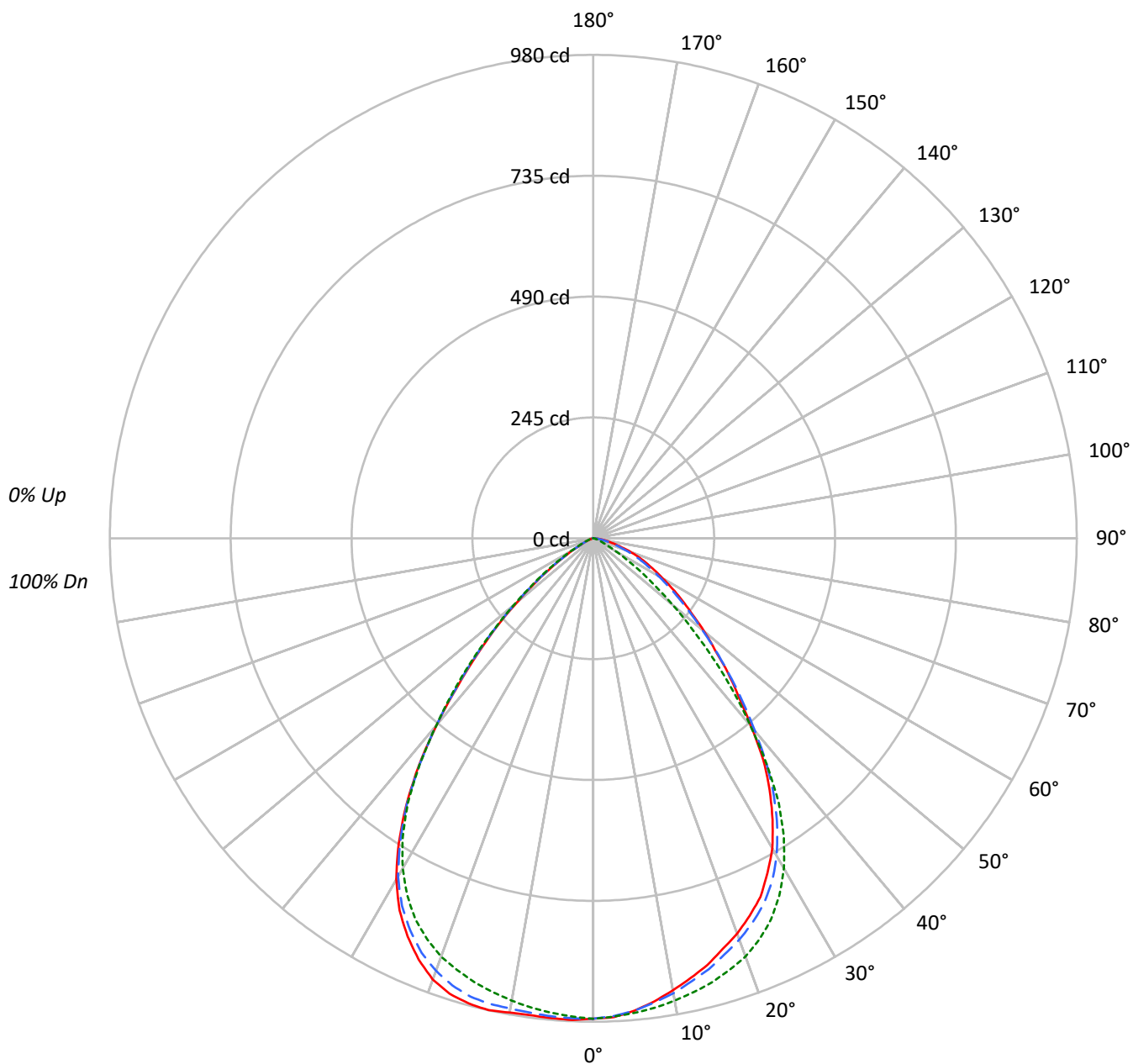
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	112	108	105	102	109	106	103	101		102	100	98		98	96	95		95	93	92
2	104	98	93	89	102	96	92	88		93	89	86		90	87	84		87	85	82
3	97	89	83	78	95	88	82	77		85	80	76		82	78	75		80	77	74
4	91	81	74	69	89	80	74	69		78	72	68		76	71	67		74	69	66
5	85	74	67	62	83	73	66	61		71	65	61		70	64	60		68	63	60
6	79	68	61	55	78	67	60	55		66	59	55		64	59	54		63	58	54
7	74	63	55	50	73	62	55	50		61	54	50		59	54	49		58	53	49
8	70	58	51	46	68	57	50	46		56	50	45		55	49	45		54	49	45
9	65	54	47	42	64	53	46	42		52	46	42		51	46	41		50	45	41
10	62	50	43	39	61	50	43	38		49	43	38		48	42	38		47	42	38

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	63544	63544	63544
5°	62936	63244	63938
10°	61636	63041	64677
15°	60464	62922	65941
20°	59208	62638	66067
25°	57746	61389	64096
30°	54677	58218	60169
35°	49650	52183	52653
40°	42378	42174	41978
45°	35596	31582	30604
50°	29728	21375	20299
55°	25024	13115	11909
60°	21177	6902	5989
65°	18339	3628	2902
70°	15260	2251	1564
75°	11268	1487	882
80°	8829	902	451
85°	7036	898	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.8	5.6
10°-20°	262.8	16.1
20°-30°	388.1	23.8
30°-40°	400.0	24.5
40°-50°	276.3	16.9
50°-60°	136.2	8.3
60°-70°	55.2	3.4
70°-80°	19.7	1.2
80°-90°	4.1	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°	742.7	45.5
0°-40°	1142.7	69.9
0°-60°	1555.1	95.2
0°-90°	1634.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1634.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	974	974	974	974	974	
5°	961	961	966	973	976	91
15°	895	905	932	962	976	252
25°	802	818	853	878	890	367
35°	623	639	655	659	661	386
45°	386	388	342	338	332	298
55°	220	212	115	108	105	199
65°	119	107	24	19	19	118
75°	45	38	6	4	4	50
85°	9	7	1	0	0	12
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°	974.0	974.0	974.0	974.0	974.0	974.0	974.0	974.0	974.0	974.0	974.0
2.5°	971.6	968.1	970.4	965.7	971.6	965.7	966.9	968.1	966.9	968.1	969.3
5°	961.0	957.5	961.0	955.1	961.0	957.5	957.5	958.7	958.7	959.8	961.0
7.5°	946.9	943.4	946.9	941.0	948.1	944.6	944.6	946.9	945.7	946.9	949.3
10°	930.4	925.7	929.3	925.7	932.8	928.1	930.4	930.4	930.4	934.0	936.3
12.5°	912.8	908.1	912.8	906.9	914.0	910.4	911.6	915.2	916.3	918.7	919.9
15°	895.2	889.3	891.6	888.1	895.2	891.6	892.8	897.5	897.5	901.0	904.6
17.5°	872.8	868.1	872.8	868.1	874.0	871.6	874.0	877.5	877.5	881.0	884.6
20°	852.8	848.1	851.6	848.1	855.2	851.6	852.8	857.5	858.7	862.2	865.7
22.5°	828.1	824.6	826.9	823.4	830.5	828.1	829.3	834.0	835.2	837.5	843.4
25°	802.2	795.2	798.7	796.3	803.4	799.9	802.2	806.9	809.3	812.8	817.5
27.5°	764.6	761.1	763.4	763.4	769.3	765.8	766.9	771.6	775.2	778.7	784.6
30°	725.8	719.9	722.2	723.4	728.1	725.8	728.1	732.8	734.0	738.7	743.4
32.5°	676.4	674.0	678.7	676.4	678.7	678.7	679.9	683.4	685.8	688.1	694.0
35°	623.4	618.7	623.4	621.1	627.0	623.4	627.0	630.5	630.5	635.2	638.7
37.5°	565.8	559.9	562.3	562.3	564.6	563.4	563.4	569.3	570.5	574.0	577.6
40°	497.6	495.2	499.9	498.7	499.9	499.9	501.1	504.6	507.0	508.2	509.3
42.5°	436.4	437.6	438.8	438.8	438.8	438.8	438.8	443.5	442.3	445.8	447.0
45°	385.8	381.1	383.5	382.3	385.8	382.3	385.8	389.4	387.0	390.5	388.2
47.5°	334.1	334.1	334.1	332.9	335.2	334.1	336.4	337.6	337.6	337.6	336.4
50°	292.9	289.4	290.5	290.5	291.7	290.5	292.9	294.1	294.1	291.7	287.0
52.5°	252.9	251.7	251.7	254.1	254.1	252.9	252.9	252.9	252.9	249.4	247.0
55°	220.0	217.6	218.8	218.8	218.8	218.8	220.0	218.8	218.8	215.3	211.7
57.5°	190.6	188.2	188.2	188.2	189.4	188.2	188.2	188.2	187.0	183.5	178.8
60°	162.3	161.2	162.3	162.3	163.5	162.3	162.3	162.3	160.0	156.4	151.7
62.5°	138.8	138.8	138.8	140.0	140.0	138.8	138.8	137.6	136.4	131.7	127.0
65°	118.8	117.6	118.8	118.8	120.0	120.0	118.8	117.6	116.5	111.7	107.0
67.5°	98.8	97.6	98.8	98.8	100.0	98.8	98.8	98.8	95.3	92.9	88.2
70°	80.0	78.8	78.8	78.8	80.0	77.6	78.8	78.8	76.5	72.9	68.2
72.5°	61.2	61.2	61.2	61.2	61.2	61.2	60.0	60.0	57.6	54.1	51.8
75°	44.7	44.7	45.9	45.9	44.7	44.7	44.7	43.5	42.3	40.0	37.6
77.5°	32.9	32.9	32.9	32.9	31.8	31.8	31.8	30.6	29.4	28.2	25.9
80°	23.5	23.5	23.5	22.3	23.5	22.3	22.3	22.3	20.0	18.8	17.6
82.5°	16.5	15.3	15.3	15.3	15.3	15.3	15.3	14.1	14.1	12.9	11.8
85°	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	8.2	7.1	7.1
87.5°	4.7	5.9	5.9	5.9	5.9	5.9	5.9	4.7	4.7	4.7	3.5
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	974.0	974.0	974.0	974.0	974.0	974.0	974.0	974.0	974.0	974.0	974.0
2.5°	969.3	969.3	971.6	968.1	974.0	970.4	969.3	975.1	971.6	970.4	972.8
5°	961.0	962.2	963.4	961.0	966.9	963.4	963.4	969.3	966.9	965.7	969.3
7.5°	950.4	951.6	954.0	952.8	957.5	955.1	956.3	962.2	959.8	959.8	963.4
10°	937.5	939.9	942.2	942.2	948.1	945.7	945.7	952.8	950.4	951.6	956.3
12.5°	922.2	925.7	929.3	930.4	936.3	932.8	934.0	942.2	941.0	942.2	946.9
15°	905.7	910.4	914.0	914.0	921.0	917.5	921.0	929.3	926.9	931.6	937.5
17.5°	886.9	891.6	896.3	897.5	904.6	902.2	906.9	915.2	915.2	917.5	924.6
20°	869.3	875.2	877.5	881.0	888.1	886.9	889.3	898.7	898.7	902.2	909.3
22.5°	845.7	851.6	856.3	859.9	865.7	865.7	869.3	877.5	877.5	879.9	886.9
25°	819.9	826.9	830.5	834.0	839.9	838.7	842.2	849.3	850.5	852.8	859.9
27.5°	786.9	792.8	797.5	799.9	808.1	803.4	806.9	815.2	814.0	816.3	822.2
30°	745.8	751.6	756.4	756.4	763.4	763.4	766.9	770.5	770.5	772.8	777.5
32.5°	697.5	704.6	704.6	708.1	712.8	708.1	712.8	717.5	715.2	718.7	722.2
35°	642.3	645.8	647.0	647.0	650.5	649.3	648.1	651.7	649.3	655.2	658.7
37.5°	575.2	579.9	577.6	579.9	578.7	575.2	575.2	581.1	576.4	577.6	581.1
40°	510.5	510.5	509.3	503.5	504.6	501.1	499.9	501.1	496.4	495.2	499.9
42.5°	443.5	442.3	438.8	430.5	431.7	425.8	421.1	421.1	418.8	417.6	418.8
45°	383.5	379.9	374.1	364.6	362.3	357.6	348.2	345.8	342.3	342.3	343.5
47.5°	328.2	323.5	314.1	303.5	297.6	291.7	282.3	278.8	272.9	270.5	272.9
50°	282.3	274.1	262.3	247.0	241.1	234.1	224.7	218.8	212.9	210.6	209.4
52.5°	240.0	228.2	216.4	197.6	192.9	185.9	172.9	167.0	161.2	156.4	156.4
55°	203.5	192.9	176.4	158.8	151.7	144.7	131.7	123.5	117.6	115.3	112.9
57.5°	170.6	158.8	143.5	124.7	117.6	110.6	97.6	89.4	83.5	80.0	77.6
60°	143.5	130.6	115.3	98.8	90.6	83.5	70.6	62.3	56.5	52.9	50.6
62.5°	117.6	107.0	91.8	76.5	69.4	62.3	51.8	43.5	37.6	35.3	31.8
65°	98.8	88.2	74.1	61.2	55.3	48.2	38.8	31.8	27.1	23.5	21.2
67.5°	80.0	71.8	60.0	48.2	42.3	37.6	29.4	23.5	18.8	16.5	15.3
70°	63.5	55.3	45.9	36.5	32.9	28.2	22.3	16.5	14.1	11.8	10.6
72.5°	47.1	41.2	34.1	27.1	23.5	21.2	15.3	12.9	9.4	8.2	7.1
75°	34.1	29.4	24.7	18.8	16.5	15.3	11.8	8.2	7.1	5.9	4.7
77.5°	23.5	21.2	16.5	12.9	11.8	10.6	8.2	5.9	4.7	3.5	3.5
80°	15.3	12.9	10.6	8.2	8.2	7.1	4.7	3.5	3.5	2.4	2.4
82.5°	9.4	8.2	7.1	5.9	4.7	4.7	3.5	2.4	2.4	1.2	1.2
85°	5.9	4.7	3.5	3.5	2.4	2.4	2.4	1.2	1.2	1.2	1.2
87.5°	2.4	2.4	2.4	1.2	1.2	1.2	1.2	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°	974.0	974.0	974.0	974.0	974.0	974.0	974.0	974.0	974.0	974.0	974.0
2.5°	972.8	972.8	975.1	971.6	974.0	974.0	976.3	971.6	974.0	975.1	977.5
5°	968.1	969.3	971.6	970.4	971.6	971.6	974.0	968.1	972.8	972.8	976.3
7.5°	963.4	963.4	965.7	964.6	966.9	968.1	970.4	965.7	970.4	970.4	974.0
10°	957.5	957.5	961.0	959.8	963.4	964.6	968.1	963.4	968.1	969.3	972.8
12.5°	949.3	950.4	954.0	954.0	957.5	959.8	963.4	961.0	966.9	968.1	972.8
15°	939.9	942.2	946.9	945.7	949.3	952.8	957.5	954.0	962.2	964.6	969.3
17.5°	928.1	930.4	934.0	934.0	937.5	939.9	945.7	943.4	950.4	951.6	957.5
20°	910.4	914.0	918.7	917.5	921.0	923.4	928.1	925.7	932.8	935.1	941.0
22.5°	889.3	891.6	895.2	895.2	898.7	901.0	905.7	902.2	909.3	910.4	915.2
25°	861.0	863.4	865.7	866.9	870.5	871.6	874.0	871.6	877.5	878.7	884.6
27.5°	824.6	825.8	829.3	829.3	831.6	832.8	836.3	831.6	839.9	839.9	843.4
30°	781.1	779.9	784.6	782.2	784.6	784.6	788.1	785.8	791.6	789.3	792.8
32.5°	723.4	725.8	725.8	723.4	728.1	726.9	726.9	724.6	728.1	729.3	731.6
35°	656.4	659.9	659.9	661.1	662.2	658.7	659.9	652.8	658.7	659.9	661.1
37.5°	583.4	579.9	582.3	578.7	584.6	577.6	577.6	572.9	577.6	577.6	578.7
40°	499.9	498.7	501.1	498.7	497.6	496.4	494.0	490.5	495.2	492.9	496.4
42.5°	421.1	419.9	419.9	417.6	416.4	416.4	414.1	411.7	410.5	410.5	416.4
45°	339.9	342.3	339.9	338.8	341.1	338.8	339.9	335.2	337.6	335.2	337.6
47.5°	271.7	272.9	270.5	268.2	271.7	268.2	268.2	264.7	269.4	269.4	267.0
50°	210.6	209.4	207.0	209.4	208.2	208.2	208.2	204.7	207.0	203.5	205.8
52.5°	155.3	154.1	154.1	152.9	154.1	152.9	152.9	151.7	151.7	150.6	151.7
55°	112.9	111.7	109.4	109.4	109.4	110.6	109.4	108.2	108.2	107.0	108.2
57.5°	76.5	74.1	74.1	74.1	74.1	72.9	72.9	71.8	72.9	71.8	72.9
60°	49.4	49.4	47.1	47.1	47.1	47.1	47.1	45.9	47.1	47.1	47.1
62.5°	30.6	30.6	29.4	28.2	29.4	28.2	28.2	28.2	29.4	28.2	29.4
65°	20.0	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8
67.5°	14.1	12.9	12.9	12.9	12.9	12.9	12.9	11.8	12.9	12.9	12.9
70°	9.4	9.4	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
72.5°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
75°	4.7	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
77.5°	3.5	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
80°	2.4	2.4	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
82.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
85°	1.2	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	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
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°	974.0	974.0	974.0	974.0	974.0	974.0	974.0	974.0
2.5°	974.0	975.1	972.8	974.0	971.6	974.0	975.1	977.5
5°	971.6	972.8	970.4	972.8	970.4	972.8	974.0	976.3
7.5°	969.3	971.6	969.3	971.6	969.3	971.6	972.8	975.1
10°	969.3	972.8	970.4	974.0	970.4	972.8	975.1	976.3
12.5°	969.3	972.8	971.6	974.0	972.8	975.1	977.5	979.8
15°	966.9	970.4	968.1	971.6	970.4	971.6	976.3	976.3
17.5°	954.0	957.5	957.5	959.8	959.8	963.4	965.7	968.1
20°	937.5	941.0	939.9	943.4	943.4	946.9	949.3	951.6
22.5°	912.8	917.5	916.3	919.9	918.7	921.0	925.7	924.6
25°	881.0	886.9	885.7	888.1	886.9	886.9	889.3	890.4
27.5°	842.2	845.7	844.6	846.9	844.6	846.9	849.3	850.5
30°	791.6	794.0	792.8	794.0	792.8	795.2	796.3	798.7
32.5°	730.5	734.0	730.5	732.8	731.6	731.6	736.4	734.0
35°	657.5	658.7	659.9	659.9	657.5	658.7	661.1	661.1
37.5°	576.4	582.3	575.2	578.7	577.6	577.6	577.6	581.1
40°	491.7	492.9	490.5	490.5	490.5	489.3	494.0	492.9
42.5°	411.7	412.9	411.7	408.2	409.3	409.3	412.9	408.2
45°	334.1	336.4	335.2	335.2	332.9	332.9	334.1	331.7
47.5°	264.7	267.0	263.5	264.7	262.3	264.7	263.5	265.8
50°	201.1	203.5	202.3	203.5	203.5	201.1	204.7	200.0
52.5°	150.6	151.7	150.6	149.4	148.2	148.2	150.6	149.4
55°	107.0	105.9	105.9	105.9	107.0	107.0	105.9	104.7
57.5°	71.8	71.8	70.6	70.6	71.8	69.4	70.6	69.4
60°	45.9	45.9	45.9	45.9	44.7	45.9	45.9	45.9
62.5°	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2
65°	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8
67.5°	11.8	12.9	12.9	12.9	11.8	11.8	11.8	11.8
70°	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
72.5°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
75°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
77.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
80°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
82.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.2	1.2	1.2	1.2	1.2	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)