

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: P252268

Luminaire Tested: **LD6B20D010 EU6B10209050 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252268
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 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: 1642.0 lumens
Efficiency: N/A
Efficacy: 78.9 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

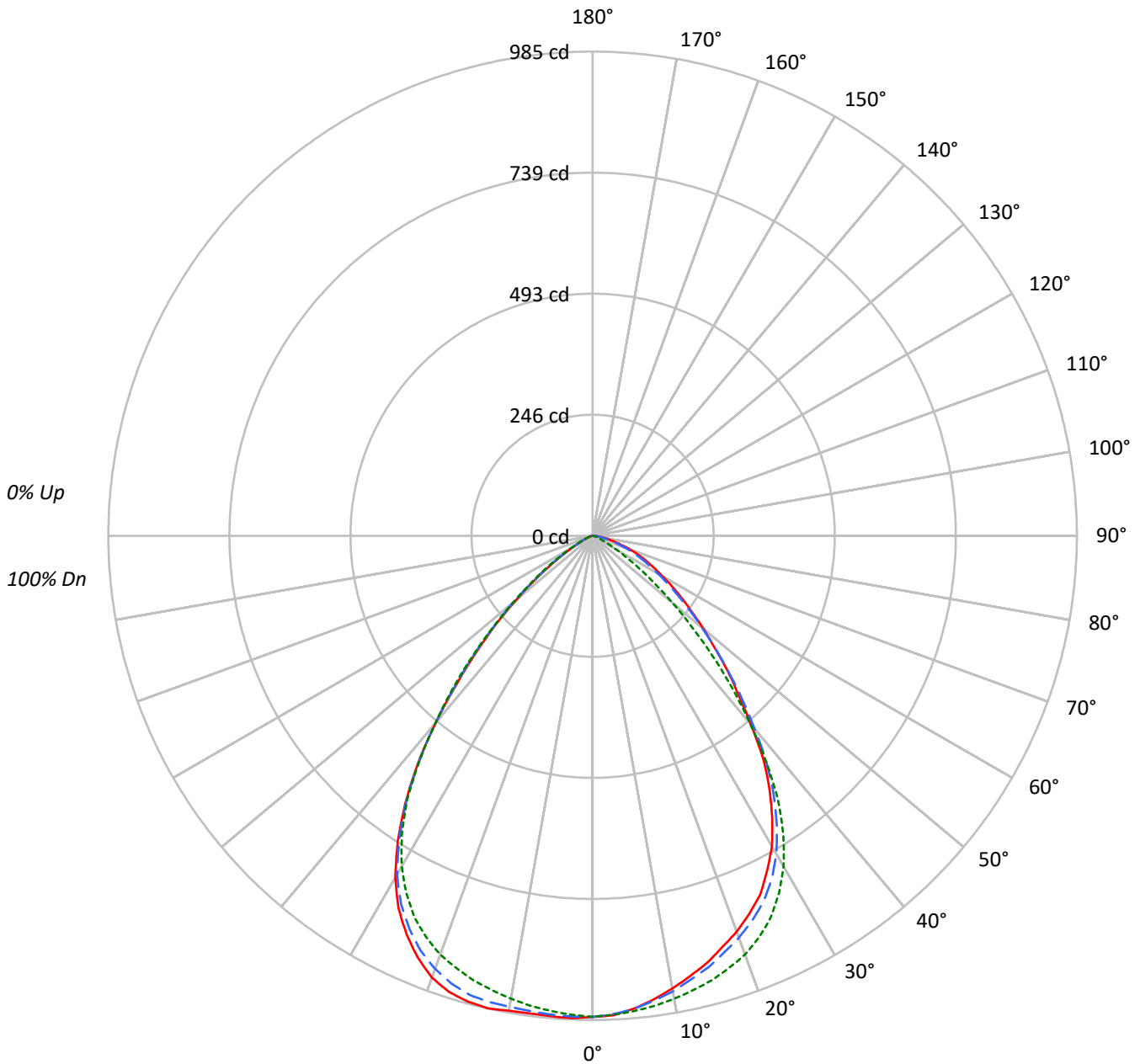
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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	112	108	105	102	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°	63851	63851	63851
5°	63244	63558	64252
10°	61941	63352	64995
15°	60754	63233	66266
20°	59499	62943	66394
25°	58034	61691	64412
30°	54941	58504	60463
35°	49897	52438	52908
40°	42583	42378	42183
45°	35771	31739	30752
50°	29870	21477	20391
55°	25137	13172	11966
60°	21281	6942	6015
65°	18432	3643	2918
70°	15336	2251	1583
75°	11318	1487	882
80°	8867	902	451
85°	7111	898	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.2	5.6
10°-20°	264.1	16.1
20°-30°	390.0	23.8
30°-40°	401.9	24.5
40°-50°	277.6	16.9
50°-60°	136.8	8.3
60°-70°	55.4	3.4
70°-80°	19.8	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°	746.3	45.5
0°-40°	1148.3	69.9
0°-60°	1562.7	95.2
0°-90°	1642.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1642.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	979	979	979	979	979	
5°	966	966	970	978	981	91
15°	900	909	936	967	981	253
25°	806	822	857	882	895	369
35°	626	642	658	662	664	388
45°	388	390	344	339	333	300
55°	221	213	116	109	105	200
65°	119	108	24	19	19	119
75°	45	38	6	4	4	50
85°	10	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°	978.7	978.7	978.7	978.7	978.7	978.7	978.7	978.7	978.7	978.7	978.7
2.5°	976.4	972.8	975.2	970.5	976.4	970.5	971.6	972.8	971.6	972.8	974.0
5°	965.7	962.2	965.7	959.8	965.7	962.2	962.2	963.4	963.4	964.5	965.7
7.5°	951.5	948.0	951.5	945.6	952.7	949.2	949.2	951.5	950.4	951.5	953.9
10°	935.0	930.3	933.8	930.3	937.4	932.6	935.0	935.0	935.0	938.5	940.9
12.5°	917.3	912.5	917.3	911.4	918.4	914.9	916.1	919.6	920.8	923.2	924.4
15°	899.5	893.6	896.0	892.4	899.5	896.0	897.2	901.9	901.9	905.4	909.0
17.5°	877.1	872.3	877.1	872.3	878.3	875.9	878.3	881.8	881.8	885.4	888.9
20°	857.0	852.3	855.8	852.3	859.3	855.8	857.0	861.7	862.9	866.4	870.0
22.5°	832.2	828.6	831.0	827.4	834.5	832.2	833.3	838.1	839.3	841.6	847.5
25°	806.2	799.1	802.6	800.2	807.3	803.8	806.2	810.9	813.2	816.8	821.5
27.5°	768.3	764.8	767.1	767.1	773.1	769.5	770.7	775.4	779.0	782.5	788.4
30°	729.3	723.4	725.8	727.0	731.7	729.3	731.7	736.4	737.6	742.3	747.1
32.5°	679.7	677.3	682.0	679.7	682.0	682.0	683.2	686.8	689.1	691.5	697.4
35°	626.5	621.8	626.5	624.1	630.0	626.5	630.0	633.6	633.6	638.3	641.9
37.5°	568.6	562.7	565.0	565.0	567.4	566.2	566.2	572.1	573.3	576.8	580.4
40°	500.0	497.6	502.4	501.2	502.4	502.4	503.6	507.1	509.5	510.6	511.8
42.5°	438.5	439.7	440.9	440.9	440.9	440.9	440.9	445.6	444.4	448.0	449.2
45°	387.7	383.0	385.3	384.2	387.7	384.2	387.7	391.3	388.9	392.4	390.1
47.5°	335.7	335.7	335.7	334.5	336.9	335.7	338.1	339.2	339.2	339.2	338.1
50°	294.3	290.8	292.0	292.0	293.1	292.0	294.3	295.5	295.5	293.1	288.4
52.5°	254.1	253.0	253.0	255.3	255.3	254.1	254.1	254.1	254.1	250.6	248.2
55°	221.0	218.7	219.9	219.9	219.9	219.9	221.0	219.9	219.9	216.3	212.8
57.5°	191.5	189.1	189.1	189.1	190.3	189.1	189.1	189.1	187.9	184.4	179.7
60°	163.1	161.9	163.1	163.1	164.3	163.1	163.1	163.1	160.8	157.2	152.5
62.5°	139.5	139.5	139.5	140.7	140.7	139.5	139.5	138.3	137.1	132.4	127.7
65°	119.4	118.2	119.4	119.4	120.6	120.6	119.4	118.2	117.0	112.3	107.6
67.5°	99.3	98.1	99.3	99.3	100.5	99.3	99.3	99.3	95.7	93.4	88.7
70°	80.4	79.2	79.2	79.2	80.4	78.0	79.2	79.2	76.8	73.3	68.6
72.5°	61.5	61.5	61.5	61.5	61.5	61.5	60.3	60.3	57.9	54.4	52.0
75°	44.9	44.9	46.1	46.1	44.9	44.9	44.9	43.7	42.6	40.2	37.8
77.5°	33.1	33.1	33.1	33.1	31.9	31.9	31.9	30.7	29.6	28.4	26.0
80°	23.6	23.6	23.6	22.5	23.6	22.5	22.5	22.5	20.1	18.9	17.7
82.5°	16.5	15.4	15.4	15.4	15.4	15.4	15.4	14.2	14.2	13.0	11.8
85°	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	8.3	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°	978.7	978.7	978.7	978.7	978.7	978.7	978.7	978.7	978.7	978.7	978.7
2.5°	974.0	974.0	976.4	972.8	978.7	975.2	974.0	979.9	976.4	975.2	977.6
5°	965.7	966.9	968.1	965.7	971.6	968.1	968.1	974.0	971.6	970.5	974.0
7.5°	955.1	956.3	958.6	957.5	962.2	959.8	961.0	966.9	964.5	964.5	968.1
10°	942.1	944.5	946.8	946.8	952.7	950.4	950.4	957.5	955.1	956.3	961.0
12.5°	926.7	930.3	933.8	935.0	940.9	937.4	938.5	946.8	945.6	946.8	951.5
15°	910.2	914.9	918.4	918.4	925.5	922.0	925.5	933.8	931.5	936.2	942.1
17.5°	891.3	896.0	900.7	901.9	909.0	906.6	911.4	919.6	919.6	922.0	929.1
20°	873.5	879.4	881.8	885.4	892.4	891.3	893.6	903.1	903.1	906.6	913.7
22.5°	849.9	855.8	860.5	864.1	870.0	870.0	873.5	881.8	881.8	884.2	891.3
25°	823.9	831.0	834.5	838.1	844.0	842.8	846.3	853.4	854.6	857.0	864.1
27.5°	790.8	796.7	801.4	803.8	812.1	807.3	810.9	819.2	818.0	820.3	826.2
30°	749.4	755.3	760.1	760.1	767.1	767.1	770.7	774.2	774.2	776.6	781.3
32.5°	701.0	708.0	708.0	711.6	716.3	711.6	716.3	721.0	718.7	722.2	725.8
35°	645.4	648.9	650.1	650.1	653.7	652.5	651.3	654.9	652.5	658.4	661.9
37.5°	578.0	582.7	580.4	582.7	581.6	578.0	578.0	583.9	579.2	580.4	583.9
40°	513.0	513.0	511.8	505.9	507.1	503.6	502.4	503.6	498.8	497.6	502.4
42.5°	445.6	444.4	440.9	432.6	433.8	427.9	423.2	423.2	420.8	419.6	420.8
45°	385.3	381.8	375.9	366.4	364.1	359.3	349.9	347.5	344.0	344.0	345.2
47.5°	329.8	325.1	315.6	305.0	299.1	293.1	283.7	280.1	274.2	271.9	274.2
50°	283.7	275.4	263.6	248.2	242.3	235.2	225.8	219.9	214.0	211.6	210.4
52.5°	241.1	229.3	217.5	198.6	193.9	186.8	173.8	167.9	161.9	157.2	157.2
55°	204.5	193.9	177.3	159.6	152.5	145.4	132.4	124.1	118.2	115.8	113.5
57.5°	171.4	159.6	144.2	125.3	118.2	111.1	98.1	89.8	83.9	80.4	78.0
60°	144.2	131.2	115.8	99.3	91.0	83.9	70.9	62.6	56.7	53.2	50.8
62.5°	118.2	107.6	92.2	76.8	69.7	62.6	52.0	43.7	37.8	35.5	31.9
65°	99.3	88.7	74.5	61.5	55.6	48.5	39.0	31.9	27.2	23.6	21.3
67.5°	80.4	72.1	60.3	48.5	42.6	37.8	29.6	23.6	18.9	16.5	15.4
70°	63.8	55.6	46.1	36.6	33.1	28.4	22.5	16.5	14.2	11.8	10.6
72.5°	47.3	41.4	34.3	27.2	23.6	21.3	15.4	13.0	9.5	8.3	7.1
75°	34.3	29.6	24.8	18.9	16.5	15.4	11.8	8.3	7.1	5.9	4.7
77.5°	23.6	21.3	16.5	13.0	11.8	10.6	8.3	5.9	4.7	3.5	3.5
80°	15.4	13.0	10.6	8.3	8.3	7.1	4.7	3.5	3.5	2.4	2.4
82.5°	9.5	8.3	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°	978.7	978.7	978.7	978.7	978.7	978.7	978.7	978.7	978.7	978.7	978.7
2.5°	977.6	977.6	979.9	976.4	978.7	978.7	981.1	976.4	978.7	979.9	982.3
5°	972.8	974.0	976.4	975.2	976.4	976.4	978.7	972.8	977.6	977.6	981.1
7.5°	968.1	968.1	970.5	969.3	971.6	972.8	975.2	970.5	975.2	975.2	978.7
10°	962.2	962.2	965.7	964.5	968.1	969.3	972.8	968.1	972.8	974.0	977.6
12.5°	953.9	955.1	958.6	958.6	962.2	964.5	968.1	965.7	971.6	972.8	977.6
15°	944.5	946.8	951.5	950.4	953.9	957.5	962.2	958.6	966.9	969.3	974.0
17.5°	932.6	935.0	938.5	938.5	942.1	944.5	950.4	948.0	955.1	956.3	962.2
20°	914.9	918.4	923.2	922.0	925.5	927.9	932.6	930.3	937.4	939.7	945.6
22.5°	893.6	896.0	899.5	899.5	903.1	905.4	910.2	906.6	913.7	914.9	919.6
25°	865.3	867.6	870.0	871.2	874.7	875.9	878.3	875.9	881.8	883.0	888.9
27.5°	828.6	829.8	833.3	833.3	835.7	836.9	840.4	835.7	844.0	844.0	847.5
30°	784.9	783.7	788.4	786.1	788.4	788.4	792.0	789.6	795.5	793.2	796.7
32.5°	727.0	729.3	729.3	727.0	731.7	730.5	730.5	728.1	731.7	732.9	735.2
35°	659.6	663.1	663.1	664.3	665.5	661.9	663.1	656.0	661.9	663.1	664.3
37.5°	586.3	582.7	585.1	581.6	587.5	580.4	580.4	575.7	580.4	580.4	581.6
40°	502.4	501.2	503.6	501.2	500.0	498.8	496.5	492.9	497.6	495.3	498.8
42.5°	423.2	422.0	422.0	419.6	418.4	418.4	416.1	413.7	412.5	412.5	418.4
45°	341.6	344.0	341.6	340.4	342.8	340.4	341.6	336.9	339.2	336.9	339.2
47.5°	273.1	274.2	271.9	269.5	273.1	269.5	269.5	266.0	270.7	270.7	268.3
50°	211.6	210.4	208.0	210.4	209.2	209.2	209.2	205.7	208.0	204.5	206.9
52.5°	156.0	154.8	154.8	153.7	154.8	153.7	153.7	152.5	152.5	151.3	152.5
55°	113.5	112.3	109.9	109.9	109.9	111.1	109.9	108.7	108.7	107.6	108.7
57.5°	76.8	74.5	74.5	74.5	74.5	73.3	73.3	72.1	73.3	72.1	73.3
60°	49.6	49.6	47.3	47.3	47.3	47.3	47.3	46.1	47.3	47.3	47.3
62.5°	30.7	30.7	29.6	28.4	29.6	28.4	28.4	28.4	29.6	28.4	29.6
65°	20.1	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9
67.5°	14.2	13.0	13.0	13.0	13.0	13.0	13.0	11.8	13.0	13.0	13.0
70°	9.5	9.5	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
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°	978.7	978.7	978.7	978.7	978.7	978.7	978.7	978.7
2.5°	978.7	979.9	977.6	978.7	976.4	978.7	979.9	982.3
5°	976.4	977.6	975.2	977.6	975.2	977.6	978.7	981.1
7.5°	974.0	976.4	974.0	976.4	974.0	976.4	977.6	979.9
10°	974.0	977.6	975.2	978.7	975.2	977.6	979.9	981.1
12.5°	974.0	977.6	976.4	978.7	977.6	979.9	982.3	984.6
15°	971.6	975.2	972.8	976.4	975.2	976.4	981.1	981.1
17.5°	958.6	962.2	962.2	964.5	964.5	968.1	970.5	972.8
20°	942.1	945.6	944.5	948.0	948.0	951.5	953.9	956.3
22.5°	917.3	922.0	920.8	924.4	923.2	925.5	930.3	929.1
25°	885.4	891.3	890.1	892.4	891.3	891.3	893.6	894.8
27.5°	846.3	849.9	848.7	851.1	848.7	851.1	853.4	854.6
30°	795.5	797.9	796.7	797.9	796.7	799.1	800.2	802.6
32.5°	734.0	737.6	734.0	736.4	735.2	735.2	740.0	737.6
35°	660.8	661.9	663.1	663.1	660.8	661.9	664.3	664.3
37.5°	579.2	585.1	578.0	581.6	580.4	580.4	580.4	583.9
40°	494.1	495.3	492.9	492.9	492.9	491.7	496.5	495.3
42.5°	413.7	414.9	413.7	410.2	411.4	411.4	414.9	410.2
45°	335.7	338.1	336.9	336.9	334.5	334.5	335.7	333.3
47.5°	266.0	268.3	264.8	266.0	263.6	266.0	264.8	267.1
50°	202.1	204.5	203.3	204.5	204.5	202.1	205.7	200.9
52.5°	151.3	152.5	151.3	150.1	148.9	148.9	151.3	150.1
55°	107.6	106.4	106.4	106.4	107.6	107.6	106.4	105.2
57.5°	72.1	72.1	70.9	70.9	72.1	69.7	70.9	69.7
60°	46.1	46.1	46.1	46.1	44.9	46.1	46.1	46.1
62.5°	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4
65°	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9
67.5°	11.8	13.0	13.0	13.0	11.8	11.8	11.8	11.8
70°	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
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)