

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: P252265

Luminaire Tested: **LD6B20D010 EU6B10209030 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252265
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 EU6B10209030 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1609.0 lumens
Efficiency: N/A
Efficacy: 77.4 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

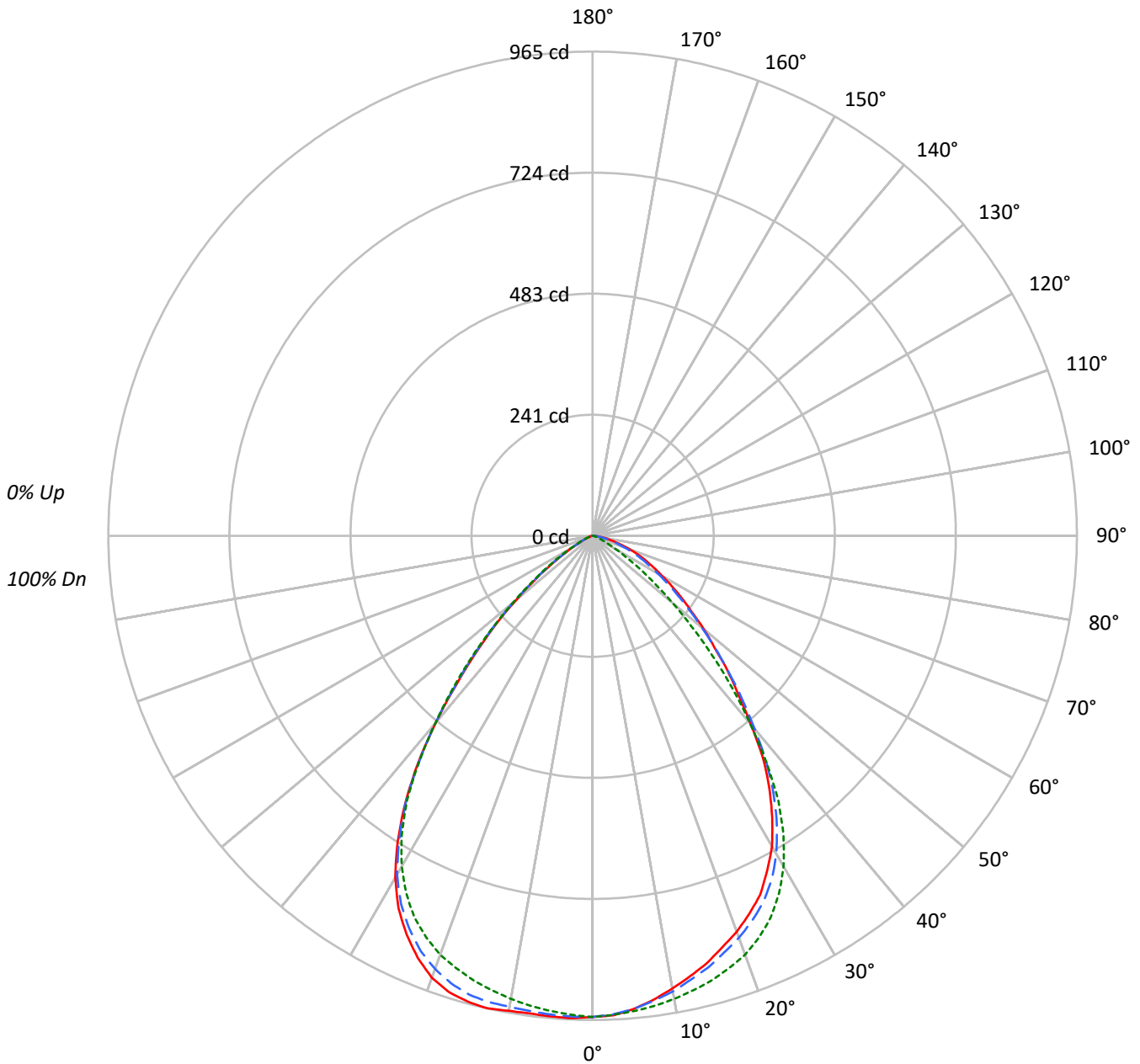
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				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				100
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				90
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	85	82	80				80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72				72
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64				64
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58				58
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52				52
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47				47
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43				43
9	65	54	47	42	64	53	46	42	52	46	42	51	46	41	50	45	41	40				40
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	37				37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	62572	62572	62572
5°	61973	62281	62962
10°	60696	62080	63690
15°	59538	61963	64935
20°	58305	61680	65061
25°	56868	60453	63117
30°	53841	57329	59250
35°	48894	51386	51848
40°	41731	41527	41331
45°	35051	31102	30133
50°	29272	21040	19985
55°	24637	12910	11727
60°	20851	6798	5898
65°	18062	3581	2856
70°	15031	2213	1545
75°	11091	1462	882
80°	8716	864	451
85°	6962	898	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.4	5.6
10°-20°	258.8	16.1
20°-30°	382.2	23.8
30°-40°	393.8	24.5
40°-50°	272.0	16.9
50°-60°	134.1	8.3
60°-70°	54.3	3.4
70°-80°	19.4	1.2
80°-90°	4.0	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°	731.3	45.5
0°-40°	1125.2	69.9
0°-60°	1531.3	95.2
0°-90°	1609.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1609.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	959	959	959	959	959	
5°	946	946	951	958	961	89
15°	882	891	917	948	961	248
25°	790	805	840	864	877	361
35°	614	629	645	649	651	380
45°	380	382	337	332	327	294
55°	217	208	114	107	103	196
65°	117	105	23	18	18	116
75°	44	37	6	4	4	49
85°	9	7	1	0	0	11
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°	959.1	959.1	959.1	959.1	959.1	959.1	959.1	959.1	959.1	959.1	959.1
2.5°	956.7	953.3	955.6	951.0	956.7	951.0	952.1	953.3	952.1	953.3	954.4
5°	946.3	942.8	946.3	940.5	946.3	942.8	942.8	944.0	944.0	945.2	946.3
7.5°	932.4	928.9	932.4	926.6	933.6	930.1	930.1	932.4	931.3	932.4	934.7
10°	916.2	911.6	915.0	911.6	918.5	913.9	916.2	916.2	916.2	919.7	922.0
12.5°	898.8	894.2	898.8	893.0	900.0	896.5	897.7	901.1	902.3	904.6	905.8
15°	881.5	875.7	878.0	874.5	881.5	878.0	879.1	883.8	883.8	887.2	890.7
17.5°	859.5	854.8	859.5	854.8	860.6	858.3	860.6	864.1	864.1	867.6	871.0
20°	839.8	835.1	838.6	835.1	842.1	838.6	839.8	844.4	845.6	849.0	852.5
22.5°	815.4	812.0	814.3	810.8	817.8	815.4	816.6	821.2	822.4	824.7	830.5
25°	790.0	783.0	786.5	784.2	791.1	787.6	790.0	794.6	796.9	800.4	805.0
27.5°	752.9	749.4	751.7	751.7	757.5	754.0	755.2	759.8	763.3	766.8	772.6
30°	714.7	708.9	711.2	712.3	717.0	714.7	717.0	721.6	722.8	727.4	732.0
32.5°	666.0	663.7	668.3	666.0	668.3	668.3	669.5	673.0	675.3	677.6	683.4
35°	613.9	609.3	613.9	611.6	617.4	613.9	617.4	620.8	620.8	625.5	629.0
37.5°	557.1	551.3	553.7	553.7	556.0	554.8	554.8	560.6	561.8	565.2	568.7
40°	490.0	487.6	492.3	491.1	492.3	492.3	493.4	496.9	499.2	500.4	501.5
42.5°	429.7	430.9	432.0	432.0	432.0	432.0	432.0	436.7	435.5	439.0	440.1
45°	379.9	375.3	377.6	376.4	379.9	376.4	379.9	383.4	381.1	384.6	382.2
47.5°	329.0	329.0	329.0	327.8	330.1	329.0	331.3	332.4	332.4	332.4	331.3
50°	288.4	284.9	286.1	286.1	287.3	286.1	288.4	289.6	289.6	287.3	282.6
52.5°	249.0	247.9	247.9	250.2	250.2	249.0	249.0	249.0	249.0	245.6	243.2
55°	216.6	214.3	215.4	215.4	215.4	215.4	216.6	215.4	215.4	212.0	208.5
57.5°	187.6	185.3	185.3	185.3	186.5	185.3	185.3	185.3	184.2	180.7	176.1
60°	159.8	158.7	159.8	159.8	161.0	159.8	159.8	159.8	157.5	154.1	149.4
62.5°	136.7	136.7	136.7	137.8	137.8	136.7	136.7	135.5	134.4	129.7	125.1
65°	117.0	115.8	117.0	117.0	118.1	118.1	117.0	115.8	114.7	110.0	105.4
67.5°	97.3	96.1	97.3	97.3	98.5	97.3	97.3	97.3	93.8	91.5	86.9
70°	78.8	77.6	77.6	77.6	78.8	76.4	77.6	77.6	75.3	71.8	67.2
72.5°	60.2	60.2	60.2	60.2	60.2	60.2	59.1	59.1	56.8	53.3	51.0
75°	44.0	44.0	45.2	45.2	44.0	44.0	44.0	42.9	41.7	39.4	37.1
77.5°	32.4	32.4	32.4	32.4	31.3	31.3	31.3	30.1	29.0	27.8	25.5
80°	23.2	23.2	23.2	22.0	23.2	22.0	22.0	22.0	19.7	18.5	17.4
82.5°	16.2	15.1	15.1	15.1	15.1	15.1	15.1	13.9	13.9	12.7	11.6
85°	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	8.1	6.9	6.9
87.5°	4.6	5.8	5.8	5.8	5.8	5.8	5.8	4.6	4.6	4.6	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°	959.1	959.1	959.1	959.1	959.1	959.1	959.1	959.1	959.1	959.1	959.1
2.5°	954.4	954.4	956.7	953.3	959.1	955.6	954.4	960.2	956.7	955.6	957.9
5°	946.3	947.5	948.6	946.3	952.1	948.6	948.6	954.4	952.1	951.0	954.4
7.5°	935.9	937.1	939.4	938.2	942.8	940.5	941.7	947.5	945.2	945.2	948.6
10°	923.2	925.5	927.8	927.8	933.6	931.3	931.3	938.2	935.9	937.1	941.7
12.5°	908.1	911.6	915.0	916.2	922.0	918.5	919.7	927.8	926.6	927.8	932.4
15°	891.9	896.5	900.0	900.0	906.9	903.5	906.9	915.0	912.7	917.4	923.2
17.5°	873.3	878.0	882.6	883.8	890.7	888.4	893.0	901.1	901.1	903.5	910.4
20°	856.0	861.8	864.1	867.6	874.5	873.3	875.7	884.9	884.9	888.4	895.4
22.5°	832.8	838.6	843.2	846.7	852.5	852.5	856.0	864.1	864.1	866.4	873.3
25°	807.3	814.3	817.8	821.2	827.0	825.9	829.3	836.3	837.4	839.8	846.7
27.5°	774.9	780.7	785.3	787.6	795.7	791.1	794.6	802.7	801.5	803.9	809.6
30°	734.4	740.1	744.8	744.8	751.7	751.7	755.2	758.7	758.7	761.0	765.6
32.5°	686.9	693.8	693.8	697.3	701.9	697.3	701.9	706.6	704.2	707.7	711.2
35°	632.4	635.9	637.1	637.1	640.5	639.4	638.2	641.7	639.4	645.2	648.6
37.5°	566.4	571.0	568.7	571.0	569.9	566.4	566.4	572.2	567.6	568.7	572.2
40°	502.7	502.7	501.5	495.7	496.9	493.4	492.3	493.4	488.8	487.6	492.3
42.5°	436.7	435.5	432.0	423.9	425.1	419.3	414.7	414.7	412.4	411.2	412.4
45°	377.6	374.1	368.3	359.1	356.8	352.1	342.9	340.5	337.1	337.1	338.2
47.5°	323.2	318.5	309.3	298.8	293.0	287.3	278.0	274.5	268.7	266.4	268.7
50°	278.0	269.9	258.3	243.2	237.4	230.5	221.2	215.4	209.7	207.3	206.2
52.5°	236.3	224.7	213.1	194.6	190.0	183.0	170.3	164.5	158.7	154.1	154.1
55°	200.4	190.0	173.7	156.4	149.4	142.5	129.7	121.6	115.8	113.5	111.2
57.5°	168.0	156.4	141.3	122.8	115.8	108.9	96.1	88.0	82.2	78.8	76.4
60°	141.3	128.6	113.5	97.3	89.2	82.2	69.5	61.4	55.6	52.1	49.8
62.5°	115.8	105.4	90.3	75.3	68.3	61.4	51.0	42.9	37.1	34.7	31.3
65°	97.3	86.9	73.0	60.2	54.4	47.5	38.2	31.3	26.6	23.2	20.8
67.5°	78.8	70.7	59.1	47.5	41.7	37.1	29.0	23.2	18.5	16.2	15.1
70°	62.5	54.4	45.2	35.9	32.4	27.8	22.0	16.2	13.9	11.6	10.4
72.5°	46.3	40.5	33.6	26.6	23.2	20.8	15.1	12.7	9.3	8.1	6.9
75°	33.6	29.0	24.3	18.5	16.2	15.1	11.6	8.1	6.9	5.8	4.6
77.5°	23.2	20.8	16.2	12.7	11.6	10.4	8.1	5.8	4.6	3.5	3.5
80°	15.1	12.7	10.4	8.1	8.1	6.9	4.6	3.5	3.5	2.3	2.3
82.5°	9.3	8.1	6.9	5.8	4.6	4.6	3.5	2.3	2.3	1.2	1.2
85°	5.8	4.6	3.5	3.5	2.3	2.3	2.3	1.2	1.2	1.2	1.2
87.5°	2.3	2.3	2.3	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°	959.1	959.1	959.1	959.1	959.1	959.1	959.1	959.1	959.1	959.1	959.1
2.5°	957.9	957.9	960.2	956.7	959.1	959.1	961.4	956.7	959.1	960.2	962.5
5°	953.3	954.4	956.7	955.6	956.7	956.7	959.1	953.3	957.9	957.9	961.4
7.5°	948.6	948.6	951.0	949.8	952.1	953.3	955.6	951.0	955.6	955.6	959.1
10°	942.8	942.8	946.3	945.2	948.6	949.8	953.3	948.6	953.3	954.4	957.9
12.5°	934.7	935.9	939.4	939.4	942.8	945.2	948.6	946.3	952.1	953.3	957.9
15°	925.5	927.8	932.4	931.3	934.7	938.2	942.8	939.4	947.5	949.8	954.4
17.5°	913.9	916.2	919.7	919.7	923.2	925.5	931.3	928.9	935.9	937.1	942.8
20°	896.5	900.0	904.6	903.5	906.9	909.3	913.9	911.6	918.5	920.8	926.6
22.5°	875.7	878.0	881.5	881.5	884.9	887.2	891.9	888.4	895.4	896.5	901.1
25°	847.9	850.2	852.5	853.7	857.1	858.3	860.6	858.3	864.1	865.2	871.0
27.5°	812.0	813.1	816.6	816.6	818.9	820.1	823.5	818.9	827.0	827.0	830.5
30°	769.1	767.9	772.6	770.3	772.6	772.6	776.1	773.7	779.5	777.2	780.7
32.5°	712.3	714.7	714.7	712.3	717.0	715.8	715.8	713.5	717.0	718.1	720.5
35°	646.3	649.8	649.8	651.0	652.1	648.6	649.8	642.9	648.6	649.8	651.0
37.5°	574.5	571.0	573.4	569.9	575.7	568.7	568.7	564.1	568.7	568.7	569.9
40°	492.3	491.1	493.4	491.1	490.0	488.8	486.5	483.0	487.6	485.3	488.8
42.5°	414.7	413.5	413.5	411.2	410.0	410.0	407.7	405.4	404.2	404.2	410.0
45°	334.7	337.1	334.7	333.6	335.9	333.6	334.7	330.1	332.4	330.1	332.4
47.5°	267.6	268.7	266.4	264.1	267.6	264.1	264.1	260.6	265.2	265.2	262.9
50°	207.3	206.2	203.9	206.2	205.0	205.0	205.0	201.5	203.9	200.4	202.7
52.5°	152.9	151.7	151.7	150.6	151.7	150.6	150.6	149.4	149.4	148.3	149.4
55°	111.2	110.0	107.7	107.7	107.7	108.9	107.7	106.6	106.6	105.4	106.6
57.5°	75.3	73.0	73.0	73.0	73.0	71.8	71.8	70.7	71.8	70.7	71.8
60°	48.6	48.6	46.3	46.3	46.3	46.3	46.3	45.2	46.3	46.3	46.3
62.5°	30.1	30.1	29.0	27.8	29.0	27.8	27.8	27.8	29.0	27.8	29.0
65°	19.7	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5
67.5°	13.9	12.7	12.7	12.7	12.7	12.7	12.7	11.6	12.7	12.7	12.7
70°	9.3	9.3	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
72.5°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
75°	4.6	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
77.5°	3.5	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
80°	2.3	2.3	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°	959.1	959.1	959.1	959.1	959.1	959.1	959.1	959.1
2.5°	959.1	960.2	957.9	959.1	956.7	959.1	960.2	962.5
5°	956.7	957.9	955.6	957.9	955.6	957.9	959.1	961.4
7.5°	954.4	956.7	954.4	956.7	954.4	956.7	957.9	960.2
10°	954.4	957.9	955.6	959.1	955.6	957.9	960.2	961.4
12.5°	954.4	957.9	956.7	959.1	957.9	960.2	962.5	964.9
15°	952.1	955.6	953.3	956.7	955.6	956.7	961.4	961.4
17.5°	939.4	942.8	942.8	945.2	945.2	948.6	951.0	953.3
20°	923.2	926.6	925.5	928.9	928.9	932.4	934.7	937.1
22.5°	898.8	903.5	902.3	905.8	904.6	906.9	911.6	910.4
25°	867.6	873.3	872.2	874.5	873.3	873.3	875.7	876.8
27.5°	829.3	832.8	831.7	834.0	831.7	834.0	836.3	837.4
30°	779.5	781.8	780.7	781.8	780.7	783.0	784.2	786.5
32.5°	719.3	722.8	719.3	721.6	720.5	720.5	725.1	722.8
35°	647.5	648.6	649.8	649.8	647.5	648.6	651.0	651.0
37.5°	567.6	573.4	566.4	569.9	568.7	568.7	568.7	572.2
40°	484.2	485.3	483.0	483.0	483.0	481.8	486.5	485.3
42.5°	405.4	406.6	405.4	401.9	403.1	403.1	406.6	401.9
45°	329.0	331.3	330.1	330.1	327.8	327.8	329.0	326.6
47.5°	260.6	262.9	259.5	260.6	258.3	260.6	259.5	261.8
50°	198.1	200.4	199.2	200.4	200.4	198.1	201.5	196.9
52.5°	148.3	149.4	148.3	147.1	145.9	145.9	148.3	147.1
55°	105.4	104.2	104.2	104.2	105.4	105.4	104.2	103.1
57.5°	70.7	70.7	69.5	69.5	70.7	68.3	69.5	68.3
60°	45.2	45.2	45.2	45.2	44.0	45.2	45.2	45.2
62.5°	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8
65°	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5
67.5°	11.6	12.7	12.7	12.7	11.6	11.6	11.6	11.6
70°	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
72.5°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
75°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
77.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
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)