

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: P252675

Luminaire Tested: **LD6B20D010 EU6B10208030 6LBDW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252675  
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 EU6B10208030 6LBDW1H  
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1903.0 lumens  
Efficiency: N/A  
Efficacy: 91.5 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

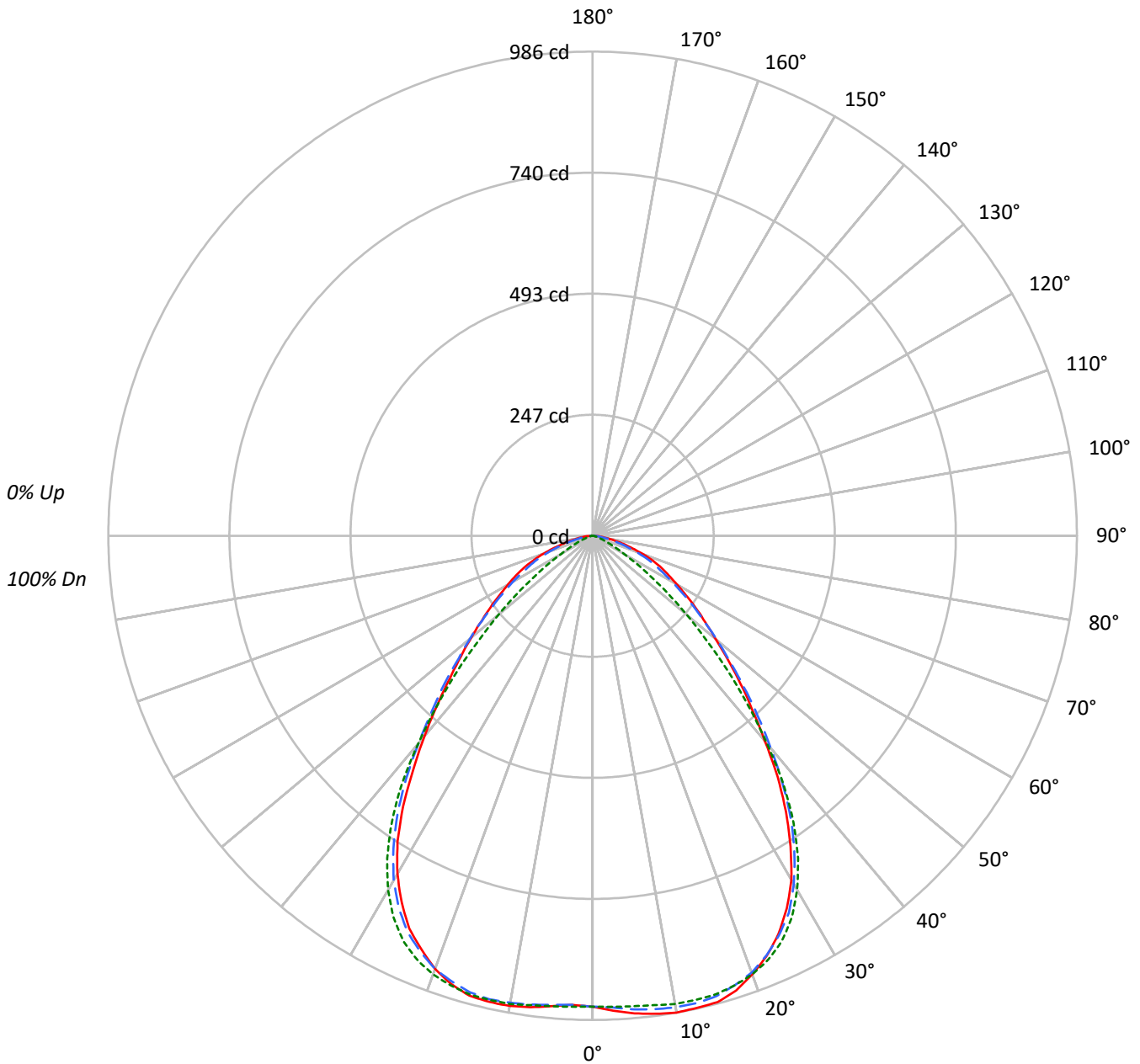
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
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°	62553	62553	62553
5°	63944	62968	62968
10°	65313	64147	64412
15°	66407	65306	65489
20°	65998	65998	65151
25°	64427	65600	63548
30°	60990	62730	59867
35°	54652	56810	53569
40°	46432	47003	45274
45°	39286	35909	37911
50°	33169	25323	32763
55°	29152	16345	28845
60°	25835	9734	26005
65°	23866	5866	23866
70°	20696	3357	20181
75°	16410	2042	15376
80°	12210	1540	11722
85°	11153	1048	10180



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.3	4.9
10°-20°	273.2	14.4
20°-30°	410.9	21.6
30°-40°	432.0	22.7
40°-50°	322.7	17.0
50°-60°	200.9	10.6
60°-70°	114.3	6.0
70°-80°	47.1	2.5
80°-90°	9.7	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°	776.4	40.8
0°-40°	1208.3	63.5
0°-60°	1732.0	91.0
0°-90°	1903.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1903.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	959	959	959	959	959	
5°	976	968	962	959	962	93
15°	983	971	967	963	970	276
25°	895	898	911	891	883	410
35°	686	704	713	693	673	426
45°	426	435	389	427	411	330
55°	256	251	144	247	254	231
65°	155	138	38	138	155	152
75°	65	52	8	50	61	71
85°	15	10	1	8	14	17
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°	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8
2.5°	968.3	966.9	968.3	965.6	964.2	964.2	965.6	962.8	961.5	962.8	961.5
5°	976.4	973.7	975.0	973.7	971.0	971.0	972.3	968.3	968.3	969.6	968.3
7.5°	981.8	981.8	981.8	979.1	977.8	976.4	979.1	975.0	973.7	973.7	972.3
10°	985.9	984.5	985.9	983.2	980.5	979.1	981.8	979.1	976.4	979.1	975.0
12.5°	984.5	984.5	984.5	983.2	980.5	979.1	981.8	977.8	976.4	977.8	975.0
15°	983.2	979.1	980.5	979.1	975.0	975.0	976.4	972.3	969.6	973.7	971.0
17.5°	971.0	968.3	969.6	966.9	964.2	962.8	964.2	962.8	960.1	962.8	960.1
20°	950.6	950.6	952.0	949.3	946.6	945.2	947.9	945.2	942.5	946.6	946.6
22.5°	926.2	926.2	926.2	924.9	923.5	923.5	923.5	922.2	920.8	923.5	924.9
25°	895.0	893.7	895.0	896.4	895.0	893.7	895.0	895.0	892.3	897.7	897.7
27.5°	855.7	855.7	858.4	857.1	857.1	855.7	858.4	858.4	857.1	861.1	865.2
30°	809.6	806.9	809.6	809.6	811.0	811.0	812.3	812.3	812.3	816.4	819.1
32.5°	749.9	751.3	755.4	754.0	752.6	756.7	756.7	759.4	760.8	763.5	764.8
35°	686.2	687.5	687.5	688.9	691.6	688.9	695.7	694.3	695.7	701.1	703.8
37.5°	618.4	614.3	621.1	618.4	619.7	619.7	622.5	623.8	627.9	634.7	634.7
40°	545.2	546.5	549.2	550.6	551.9	551.9	551.9	556.0	557.4	565.5	564.1
42.5°	481.4	481.4	484.1	485.5	485.5	485.5	485.5	489.6	492.3	495.0	497.7
45°	425.8	421.8	424.5	424.5	427.2	425.8	428.5	431.2	432.6	436.7	435.3
47.5°	372.9	371.6	372.9	374.3	372.9	374.3	375.6	377.0	378.4	378.4	378.4
50°	326.8	326.8	328.2	329.5	329.5	329.5	329.5	330.9	330.9	333.6	330.9
52.5°	288.9	290.2	290.2	288.9	290.2	290.2	291.6	291.6	290.2	290.2	286.1
55°	256.3	254.9	256.3	254.9	256.3	256.3	254.9	254.9	253.6	252.2	250.9
57.5°	225.1	225.1	225.1	225.1	223.8	225.1	223.8	222.4	222.4	219.7	215.6
60°	198.0	198.0	198.0	198.0	198.0	196.6	198.0	196.6	193.9	191.2	185.8
62.5°	174.9	173.6	174.9	173.6	173.6	172.2	172.2	170.9	168.2	165.4	160.0
65°	154.6	156.0	154.6	154.6	153.2	151.9	151.9	150.5	146.5	143.7	138.3
67.5°	132.9	131.5	131.5	131.5	130.2	130.2	130.2	127.5	124.8	120.7	115.3
70°	108.5	108.5	108.5	107.1	107.1	105.8	105.8	104.4	101.7	99.0	92.2
72.5°	85.4	85.4	85.4	82.7	84.1	82.7	82.7	80.0	78.7	74.6	70.5
75°	65.1	65.1	63.7	63.7	62.4	61.0	61.0	59.7	58.3	55.6	51.5
77.5°	47.5	47.5	47.5	46.1	44.8	43.4	43.4	42.0	40.7	39.3	36.6
80°	32.5	32.5	32.5	32.5	31.2	29.8	29.8	28.5	28.5	27.1	24.4
82.5°	21.7	21.7	21.7	21.7	20.3	20.3	20.3	19.0	17.6	17.6	14.9
85°	14.9	14.9	13.6	13.6	13.6	13.6	12.2	12.2	10.8	9.5	9.5
87.5°	8.1	8.1	8.1	8.1	6.8	6.8	6.8	6.8	5.4	5.4	4.1
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):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8
2.5°	965.6	965.6	964.2	960.1	961.5	960.1	961.5	960.1	956.1	960.1	956.1
5°	971.0	972.3	969.6	964.2	965.6	964.2	964.2	962.8	958.8	961.5	958.8
7.5°	976.4	975.0	973.7	968.3	969.6	968.3	968.3	965.6	961.5	964.2	960.1
10°	979.1	979.1	976.4	971.0	971.0	969.6	971.0	969.6	964.2	968.3	965.6
12.5°	979.1	977.8	977.8	971.0	972.3	971.0	972.3	969.6	965.6	968.3	966.9
15°	975.0	975.0	973.7	966.9	968.3	968.3	969.6	966.9	962.8	966.9	964.2
17.5°	966.9	966.9	965.6	960.1	962.8	962.8	964.2	961.5	957.4	960.1	960.1
20°	950.6	952.0	952.0	947.9	950.6	950.6	952.0	950.6	949.3	950.6	947.9
22.5°	931.6	934.4	934.4	930.3	933.0	933.0	937.1	935.7	933.0	934.4	933.0
25°	903.2	905.9	908.6	905.9	908.6	908.6	912.7	911.3	908.6	911.3	907.2
27.5°	870.6	872.0	874.7	872.0	876.0	874.7	878.8	877.4	873.3	877.4	876.0
30°	824.5	829.9	834.0	829.9	834.0	834.0	836.7	835.4	834.0	832.7	832.7
32.5°	773.0	778.4	778.4	777.1	779.8	779.8	781.1	778.4	777.1	778.4	779.8
35°	709.2	712.0	714.7	713.3	714.7	716.0	714.7	716.0	712.0	713.3	713.3
37.5°	640.1	642.8	642.8	638.7	641.4	641.4	638.7	638.7	636.0	638.7	633.3
40°	566.9	564.1	565.5	562.8	560.1	560.1	558.7	553.3	550.6	551.9	553.3
42.5°	495.0	495.0	490.9	484.1	477.4	477.4	473.3	470.6	465.1	467.9	466.5
45°	434.0	427.2	421.8	410.9	406.8	404.1	397.3	390.6	387.8	389.2	387.8
47.5°	375.6	370.2	356.7	341.7	337.7	333.6	325.5	317.3	314.6	311.9	311.9
50°	326.8	317.3	302.4	286.1	279.4	272.6	261.7	253.6	248.2	249.5	249.5
52.5°	282.1	271.2	253.6	233.3	225.1	217.0	207.5	198.0	193.9	192.6	192.6
55°	242.7	230.5	212.9	189.9	183.1	173.6	161.4	150.5	145.1	143.7	146.5
57.5°	207.5	196.6	176.3	153.2	145.1	135.6	123.4	113.9	107.1	105.8	107.1
60°	179.0	164.1	146.5	124.8	113.9	105.8	92.2	84.1	77.3	74.6	75.9
62.5°	150.5	137.0	119.3	97.6	89.5	81.4	69.2	59.7	54.2	52.9	54.2
65°	128.8	115.3	99.0	80.0	71.9	63.7	52.9	43.4	39.3	38.0	39.3
67.5°	107.1	94.9	81.4	63.7	57.0	50.2	39.3	32.5	27.1	25.8	27.1
70°	86.8	75.9	62.4	50.2	43.4	38.0	29.8	23.1	19.0	17.6	19.0
72.5°	65.1	57.0	47.5	36.6	32.5	28.5	21.7	16.3	13.6	12.2	13.6
75°	47.5	40.7	33.9	25.8	23.1	20.3	14.9	10.8	9.5	8.1	9.5
77.5°	32.5	28.5	23.1	17.6	14.9	13.6	9.5	8.1	6.8	5.4	5.4
80°	21.7	19.0	14.9	12.2	10.8	9.5	6.8	5.4	4.1	4.1	4.1
82.5°	13.6	10.8	9.5	6.8	5.4	5.4	4.1	2.7	2.7	2.7	2.7
85°	8.1	6.8	5.4	4.1	2.7	2.7	1.4	1.4	1.4	1.4	1.4
87.5°	4.1	2.7	2.7	1.4	1.4	1.4	1.4	1.4	0.0	0.0	1.4
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°	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8
2.5°	958.8	956.1	956.1	957.4	958.8	960.1	957.4	956.1	956.1	960.1	957.4
5°	958.8	957.4	957.4	957.4	960.1	961.5	958.8	957.4	958.8	962.8	961.5
7.5°	962.8	960.1	961.5	961.5	962.8	965.6	962.8	961.5	962.8	966.9	964.2
10°	965.6	962.8	964.2	962.8	966.9	968.3	965.6	964.2	965.6	971.0	969.6
12.5°	966.9	965.6	965.6	964.2	968.3	969.6	966.9	965.6	966.9	971.0	969.6
15°	964.2	962.8	962.8	962.8	965.6	968.3	964.2	962.8	962.8	966.9	965.6
17.5°	958.8	956.1	956.1	956.1	957.4	958.8	954.7	953.3	952.0	956.1	954.7
20°	949.3	946.6	943.9	943.9	945.2	945.2	942.5	938.4	938.4	939.8	937.1
22.5°	931.6	930.3	927.6	926.2	928.9	927.6	922.2	918.1	916.7	918.1	915.4
25°	907.2	904.5	903.2	901.8	903.2	901.8	896.4	891.0	891.0	891.0	886.9
27.5°	873.3	870.6	869.3	869.3	870.6	867.9	862.5	857.1	854.4	854.4	850.3
30°	829.9	829.9	828.6	827.2	825.9	825.9	817.7	812.3	809.6	811.0	808.2
32.5°	777.1	775.7	774.3	770.3	771.6	770.3	763.5	759.4	755.4	752.6	751.3
35°	709.2	709.2	707.9	707.9	707.9	706.5	699.8	695.7	693.0	691.6	687.5
37.5°	634.7	633.3	631.9	631.9	631.9	631.9	627.9	623.8	623.8	622.5	619.7
40°	550.6	551.9	553.3	551.9	556.0	560.1	554.7	551.9	550.6	554.7	549.2
42.5°	469.2	467.9	474.6	476.0	476.0	482.8	484.1	485.5	484.1	486.8	486.8
45°	390.6	389.2	396.0	398.7	405.5	413.6	417.7	424.5	427.2	429.9	427.2
47.5°	316.0	321.4	326.8	333.6	339.0	352.6	360.7	367.5	370.2	374.3	374.3
50°	253.6	259.0	268.5	273.9	280.7	297.0	310.5	320.0	325.5	329.5	328.2
52.5°	195.3	204.8	217.0	222.4	231.9	250.9	265.8	276.6	283.4	287.5	288.9
55°	150.5	158.7	170.9	179.0	188.5	208.8	227.8	240.0	246.8	252.2	254.9
57.5°	111.2	120.7	134.3	141.0	151.9	174.9	191.2	206.1	214.3	221.0	222.4
60°	81.4	90.9	103.1	111.2	122.1	145.1	164.1	177.7	187.1	192.6	195.3
62.5°	58.3	67.8	80.0	88.1	97.6	118.0	137.0	150.5	160.0	166.8	170.9
65°	42.0	51.5	63.7	70.5	78.7	97.6	115.3	128.8	138.3	146.5	149.2
67.5°	31.2	38.0	48.8	55.6	63.7	78.7	93.6	105.8	115.3	122.1	124.8
70°	23.1	28.5	38.0	42.0	47.5	61.0	73.2	84.1	92.2	97.6	100.4
72.5°	16.3	20.3	27.1	31.2	35.3	46.1	55.6	63.7	69.2	74.6	77.3
75°	10.8	13.6	19.0	21.7	24.4	32.5	39.3	46.1	50.2	54.2	55.6
77.5°	6.8	9.5	13.6	14.9	17.6	21.7	27.1	31.2	33.9	36.6	39.3
80°	4.1	5.4	8.1	9.5	10.8	14.9	17.6	20.3	23.1	25.8	27.1
82.5°	2.7	4.1	5.4	5.4	6.8	8.1	10.8	13.6	14.9	16.3	17.6
85°	1.4	1.4	2.7	2.7	4.1	4.1	5.4	6.8	8.1	9.5	10.8
87.5°	1.4	1.4	1.4	1.4	2.7	2.7	4.1	4.1	4.1	5.4	5.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





TEST NUMBER: P252675

CATALOG NUMBER: LD6B20D010 EU6B10208030 6LBDW1H

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8
2.5°	954.7	958.8	954.7	957.4	956.1	956.1	954.7	956.1
5°	958.8	964.2	958.8	962.8	960.1	960.1	960.1	961.5
7.5°	962.8	968.3	964.2	968.3	966.9	965.6	965.6	968.3
10°	966.9	971.0	968.3	972.3	971.0	969.6	969.6	972.3
12.5°	966.9	972.3	969.6	973.7	972.3	971.0	971.0	972.3
15°	962.8	969.6	965.6	969.6	968.3	966.9	966.9	969.6
17.5°	950.6	956.1	953.3	956.1	956.1	954.7	956.1	957.4
20°	934.4	938.4	935.7	938.4	938.4	935.7	937.1	938.4
22.5°	911.3	915.4	912.7	915.4	914.0	912.7	912.7	911.3
25°	882.8	888.3	884.2	886.9	884.2	881.5	881.5	882.8
27.5°	847.6	851.6	846.2	848.9	846.2	843.5	843.5	842.1
30°	801.5	802.8	798.8	801.5	798.8	797.4	794.7	794.7
32.5°	745.9	747.2	743.2	743.2	740.4	740.4	735.0	739.1
35°	680.8	682.1	680.8	679.4	675.3	674.0	672.6	672.6
37.5°	613.0	613.0	608.9	607.5	604.8	602.1	603.5	599.4
40°	543.8	542.4	538.4	539.7	538.4	534.3	533.0	531.6
42.5°	478.7	478.7	474.6	476.0	473.3	471.9	467.9	469.2
45°	421.8	421.8	417.7	417.7	416.3	412.3	413.6	410.9
47.5°	370.2	370.2	368.9	368.9	364.8	363.4	363.4	363.4
50°	325.5	325.5	325.5	325.5	324.1	322.8	321.4	322.8
52.5°	287.5	290.2	288.9	288.9	287.5	286.1	284.8	284.8
55°	253.6	254.9	254.9	256.3	254.9	253.6	254.9	253.6
57.5°	223.8	226.5	226.5	226.5	226.5	226.5	225.1	223.8
60°	198.0	199.3	199.3	200.7	200.7	200.7	199.3	199.3
62.5°	172.2	174.9	176.3	176.3	177.7	176.3	176.3	176.3
65°	151.9	154.6	156.0	154.6	156.0	156.0	154.6	154.6
67.5°	127.5	130.2	130.2	130.2	130.2	131.5	130.2	130.2
70°	103.1	105.8	104.4	105.8	105.8	105.8	105.8	105.8
72.5°	78.7	80.0	81.4	81.4	82.7	81.4	81.4	81.4
75°	57.0	59.7	59.7	59.7	59.7	61.0	61.0	61.0
77.5°	40.7	42.0	42.0	43.4	43.4	43.4	43.4	44.8
80°	28.5	28.5	29.8	29.8	31.2	31.2	31.2	31.2
82.5°	19.0	20.3	20.3	20.3	20.3	20.3	20.3	20.3
85°	10.8	12.2	12.2	12.2	12.2	13.6	13.6	13.6
87.5°	6.8	6.8	6.8	6.8	6.8	6.8	5.4	5.4
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)