

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: P274454

Luminaire Tested: **LD6B20DE010W2N2765 EU6B1020W2N902765 6LBDW0LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P274454
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-8)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B20DE010W2N2765 EU6B1020W2N902765 6LBDW0LI
Description: PORTFOLIO 6" W2N RN DOWNLIGHT, DOUBLE WALLWASH WITH SPECULAR FINISH
Light Source: W2N 2700K-6500K CCT TUNING RANGE
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1638.3 lumens
Efficiency: N/A
Efficacy: 58.5 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.22 / 1.15
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

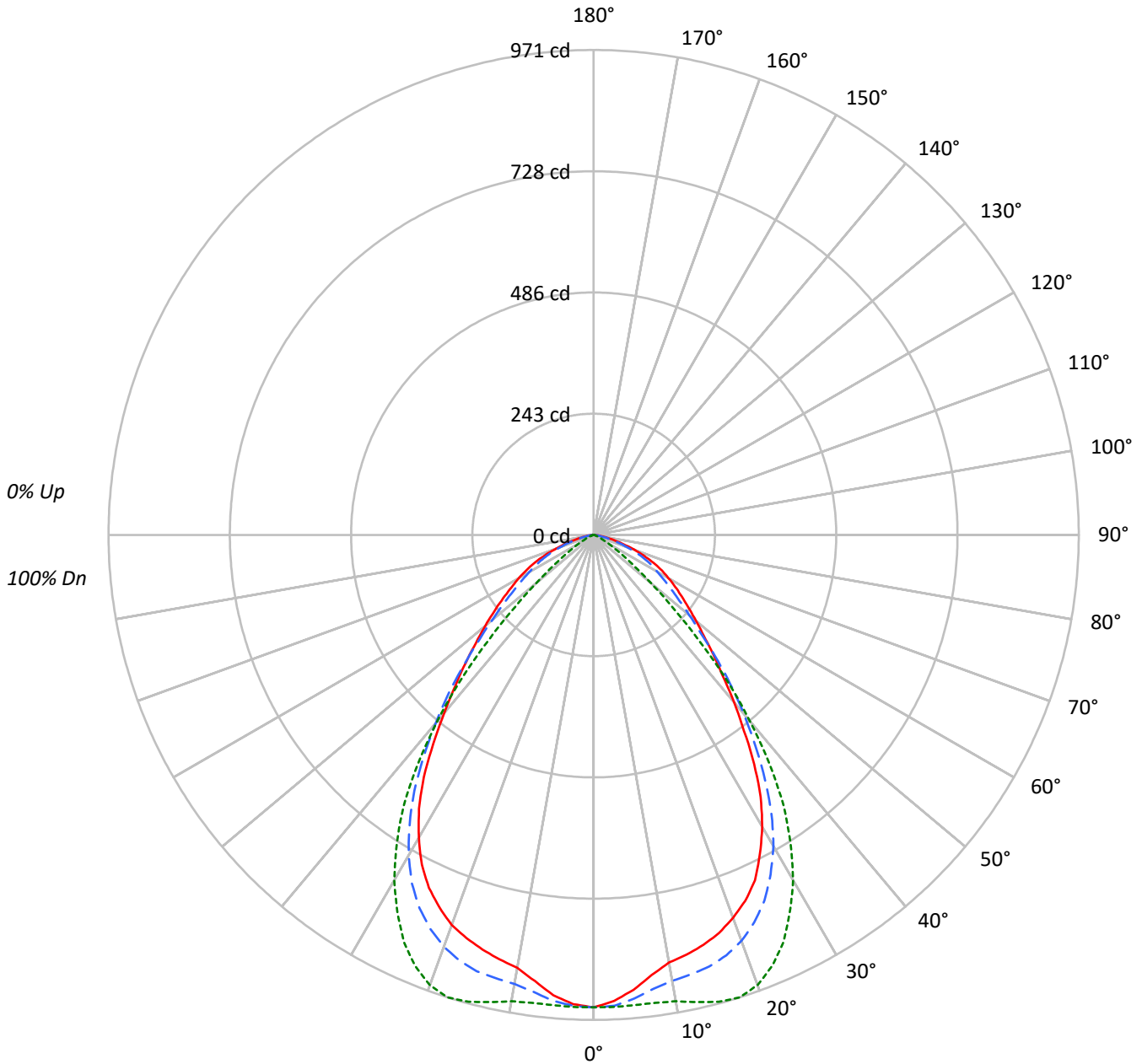
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89																			
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79																			
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70																			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62																			
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56																			
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50																			
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46																			
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42																			
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38																			
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	61711	61711	61711
5°	59871	61875	60585
10°	57589	62809	58317
15°	57390	65360	58052
20°	56639	66581	57701
25°	54946	64707	56127
30°	50827	60139	52718
35°	44593	52868	47205
40°	37158	41442	39576
45°	31278	27338	33390
50°	27079	14981	28744
55°	24500	7962	25126
60°	22547	4136	22547
65°	20423	2192	19914
70°	16481	1259	15222
75°	11293	832	10486
80°	7401	413	6575
85°	4940	823	4117



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.2	5.4
10°-20°	255.0	15.6
20°-30°	376.8	23.0
30°-40°	380.6	23.2
40°-50°	262.3	16.0
50°-60°	150.7	9.2
60°-70°	87.7	5.4
70°-80°	32.0	2.0
80°-90°	4.9	0.3
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°	720.1	44.0
0°-40°	1100.7	67.2
0°-60°	1513.7	92.4
0°-90°	1638.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1638.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	946	946	946	946	946	
5°	914	932	945	936	925	86
15°	850	894	968	904	860	239
25°	763	808	899	824	780	348
35°	560	598	664	626	593	348
45°	339	343	296	365	362	264
55°	215	189	70	197	221	194
65°	132	112	14	110	129	130
75°	45	36	3	35	42	50
85°	7	3	1	4	6	8
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°	945.9	945.9	945.9	945.9	945.9	945.9	945.9	945.9	945.9	945.9	945.9
2.5°	933.9	934.9	936.0	934.9	936.0	940.4	937.1	939.3	939.3	940.4	943.7
5°	914.2	914.2	916.4	915.3	918.5	922.9	919.6	922.9	924.0	926.2	931.7
7.5°	889.0	889.0	890.1	890.1	894.5	898.9	896.7	901.0	905.4	909.8	916.4
10°	869.3	871.5	871.5	872.6	877.0	882.5	881.4	886.8	891.2	897.8	906.5
12.5°	860.6	861.7	861.7	863.9	868.2	873.7	872.6	878.1	884.6	892.3	901.0
15°	849.7	851.8	850.7	852.9	857.3	862.8	861.7	867.1	874.8	882.5	894.5
17.5°	835.4	836.5	837.6	837.6	842.0	846.4	846.4	851.8	860.6	869.3	882.5
20°	815.8	817.9	817.9	819.0	822.3	828.9	827.8	833.2	842.0	850.7	865.0
22.5°	792.8	793.9	793.9	795.0	800.4	803.7	804.8	809.2	816.8	826.7	839.8
25°	763.3	764.4	763.3	766.5	768.7	775.3	773.1	778.6	787.3	795.0	808.1
27.5°	720.6	722.8	722.8	723.9	729.4	734.8	734.8	740.3	748.0	753.4	766.5
30°	674.7	678.0	674.7	680.2	682.3	686.7	690.0	693.3	699.8	707.5	719.5
32.5°	622.2	621.1	622.2	624.4	631.0	634.2	636.4	639.7	646.3	652.8	662.7
35°	559.9	562.1	563.2	567.5	567.5	573.0	574.1	576.3	586.1	590.5	598.1
37.5°	494.3	496.5	497.5	499.7	504.1	506.3	509.6	512.9	519.4	527.1	531.4
40°	436.3	436.3	437.4	439.6	442.9	444.0	447.2	451.6	456.0	462.6	466.9
42.5°	381.6	382.7	381.6	383.8	387.1	391.5	390.4	395.8	396.9	401.3	404.6
45°	339.0	339.0	336.8	339.0	339.0	343.4	342.3	344.5	343.4	345.5	343.4
47.5°	298.5	299.6	298.5	299.6	299.6	299.6	300.7	298.5	299.6	296.3	289.8
50°	266.8	267.9	265.7	266.8	265.7	264.6	265.7	262.4	261.3	257.0	250.4
52.5°	239.5	238.4	237.3	237.3	237.3	236.2	235.1	231.8	228.5	224.2	216.5
55°	215.4	214.3	213.2	213.2	211.0	210.0	210.0	206.7	203.4	197.9	189.2
57.5°	193.5	192.5	191.4	191.4	190.3	188.1	188.1	184.8	180.4	173.9	166.2
60°	172.8	172.8	172.8	171.7	171.7	169.5	169.5	166.2	161.8	155.3	146.5
62.5°	154.2	153.1	153.1	153.1	153.1	152.0	150.9	148.7	144.3	137.8	130.1
65°	132.3	132.3	132.3	132.3	131.2	131.2	131.2	127.9	125.8	119.2	111.5
67.5°	108.3	108.3	108.3	108.3	107.2	108.3	108.3	106.1	103.9	97.3	90.8
70°	86.4	85.3	84.2	85.3	84.2	84.2	85.3	83.1	82.0	76.5	70.0
72.5°	63.4	64.5	63.4	63.4	63.4	62.3	63.4	62.3	60.1	55.8	51.4
75°	44.8	45.9	45.9	44.8	44.8	44.8	43.7	43.7	41.6	38.3	36.1
77.5°	30.6	30.6	30.6	30.6	29.5	29.5	29.5	28.4	27.3	25.2	23.0
80°	19.7	19.7	19.7	19.7	18.6	18.6	18.6	17.5	17.5	15.3	13.1
82.5°	12.0	12.0	12.0	12.0	12.0	12.0	10.9	10.9	9.8	8.7	7.7
85°	6.6	6.6	6.6	6.6	6.6	6.6	6.6	5.5	5.5	4.4	3.3
87.5°	2.2	2.2	3.3	3.3	3.3	3.3	3.3	3.3	2.2	2.2	2.2
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	945.9	945.9	945.9	945.9	945.9	945.9	945.9	945.9	945.9	945.9	945.9
2.5°	941.5	942.6	942.6	942.6	945.9	947.0	943.7	940.4	947.0	945.9	948.1
5°	930.6	933.9	936.0	937.1	940.4	942.6	939.3	938.2	943.7	944.8	945.9
7.5°	917.4	922.9	928.4	930.6	934.9	937.1	936.0	936.0	942.6	944.8	944.8
10°	908.7	916.4	922.9	928.4	933.9	937.1	937.1	938.2	945.9	948.1	950.3
12.5°	906.5	916.4	925.1	932.8	937.1	942.6	943.7	947.0	954.6	957.9	957.9
15°	901.0	914.2	925.1	934.9	941.5	948.1	950.3	956.8	965.6	967.7	969.9
17.5°	891.2	904.3	917.4	929.5	938.2	943.7	950.3	956.8	967.7	971.0	972.1
20°	873.7	889.0	902.1	914.2	922.9	930.6	937.1	944.8	954.6	959.0	960.1
22.5°	847.5	862.8	875.9	889.0	897.8	904.3	910.9	919.6	929.5	933.9	933.9
25°	815.8	830.0	844.2	854.0	862.8	870.4	873.7	883.6	893.4	898.9	898.9
27.5°	775.3	788.4	801.5	812.5	817.9	824.5	830.0	838.7	846.4	850.7	855.1
30°	723.9	737.0	749.0	760.0	766.5	773.1	778.6	785.1	792.8	798.3	799.4
32.5°	668.1	679.1	691.1	702.0	708.6	710.8	716.2	722.8	729.4	733.7	734.8
35°	606.9	614.5	622.2	632.0	638.6	638.6	644.1	648.4	653.9	663.8	661.6
37.5°	534.7	545.7	551.1	554.4	558.8	563.2	564.2	569.7	576.3	578.5	581.7
40°	466.9	470.2	473.5	473.5	477.9	477.9	477.9	479.0	485.5	486.6	491.0
42.5°	399.1	399.1	395.8	392.6	393.7	392.6	387.1	387.1	390.4	394.8	394.8
45°	335.7	328.1	318.2	310.6	305.1	302.9	296.3	296.3	295.2	296.3	300.7
47.5°	282.1	269.0	252.6	237.3	231.8	227.4	217.6	213.2	211.0	212.1	214.3
50°	237.3	223.1	204.5	185.9	176.1	170.6	158.6	150.9	149.8	147.6	152.0
52.5°	204.5	187.0	167.3	145.4	135.6	126.8	113.7	107.2	102.8	102.8	103.9
55°	176.1	157.5	135.6	113.7	103.9	97.3	84.2	75.5	71.1	70.0	73.3
57.5°	152.0	134.5	112.6	90.8	80.9	73.3	60.1	52.5	49.2	47.0	48.1
60°	133.4	115.9	94.0	73.3	64.5	55.8	44.8	36.1	31.7	31.7	32.8
62.5°	115.9	99.5	79.8	60.1	52.5	44.8	32.8	25.2	21.9	20.8	21.9
65°	98.4	83.1	66.7	50.3	42.6	36.1	26.2	19.7	15.3	14.2	15.3
67.5°	79.8	67.8	53.6	40.5	33.9	28.4	19.7	14.2	10.9	9.8	10.9
70°	62.3	51.4	40.5	29.5	25.2	20.8	14.2	10.9	7.7	6.6	7.7
72.5°	44.8	37.2	28.4	20.8	17.5	14.2	9.8	7.7	5.5	4.4	5.5
75°	30.6	25.2	18.6	13.1	10.9	9.8	6.6	4.4	3.3	3.3	3.3
77.5°	19.7	15.3	12.0	8.7	6.6	5.5	3.3	2.2	2.2	2.2	2.2
80°	10.9	8.7	6.6	4.4	3.3	3.3	2.2	2.2	1.1	1.1	1.1
82.5°	6.6	4.4	3.3	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1
85°	3.3	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
87.5°	1.1	1.1	1.1	1.1	0.0	0.0	0.0	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°	945.9	945.9	945.9	945.9	945.9	945.9	945.9	945.9	945.9	945.9	945.9
2.5°	943.7	944.8	941.5	945.9	942.6	947.0	947.0	942.6	943.7	941.5	945.9
5°	941.5	941.5	939.3	942.6	938.2	942.6	941.5	933.9	936.0	931.7	936.0
7.5°	941.5	939.3	936.0	939.3	933.9	937.1	932.8	925.1	922.9	917.4	917.4
10°	944.8	941.5	937.1	938.2	932.8	933.9	927.3	916.4	913.1	906.5	904.3
12.5°	952.4	949.2	942.6	944.8	937.1	937.1	928.4	915.3	908.7	900.0	897.8
15°	963.4	957.9	950.3	951.3	943.7	939.3	928.4	913.1	904.3	892.3	889.0
17.5°	965.6	960.1	950.3	950.3	940.4	934.9	921.8	904.3	893.4	881.4	874.8
20°	953.5	948.1	937.1	936.0	927.3	919.6	905.4	887.9	877.0	863.9	858.4
22.5°	928.4	921.8	912.0	910.9	902.1	897.8	882.5	865.0	854.0	840.9	836.5
25°	891.2	887.9	878.1	877.0	869.3	863.9	850.7	834.3	824.5	811.4	807.0
27.5°	847.5	844.2	834.3	834.3	825.6	822.3	810.3	795.0	787.3	775.3	769.8
30°	795.0	790.6	785.1	784.0	776.4	773.1	762.2	748.0	740.3	730.5	728.3
32.5°	732.6	729.4	726.1	725.0	717.3	714.1	706.4	692.2	685.6	676.9	673.6
35°	660.5	658.3	655.0	653.9	650.6	647.4	639.7	628.8	625.5	618.9	615.6
37.5°	577.4	579.6	577.4	577.4	574.1	575.2	568.6	562.1	558.8	554.4	552.2
40°	487.7	492.1	495.4	495.4	494.3	498.6	497.5	492.1	491.0	488.8	487.7
42.5°	396.9	399.1	405.7	410.1	409.0	419.9	421.0	425.4	428.7	426.5	427.6
45°	301.8	308.4	317.1	321.5	327.0	341.2	348.8	357.6	365.2	369.6	368.5
47.5°	217.6	225.3	235.1	241.7	251.5	269.0	288.7	299.6	310.6	316.0	321.5
50°	157.5	165.1	177.1	187.0	193.5	217.6	238.4	252.6	264.6	272.3	277.7
52.5°	110.4	119.2	132.3	141.1	150.9	173.9	197.9	214.3	227.4	237.3	242.8
55°	76.5	86.4	98.4	107.2	118.1	142.2	165.1	182.6	196.8	205.6	212.1
57.5°	53.6	62.3	74.4	82.0	92.9	115.9	138.9	156.4	170.6	179.3	187.0
60°	36.1	44.8	56.9	64.5	73.3	96.2	117.0	135.6	148.7	157.5	165.1
62.5°	25.2	32.8	44.8	52.5	60.1	79.8	99.5	115.9	129.0	138.9	145.4
65°	19.7	26.2	36.1	42.6	50.3	66.7	83.1	97.3	110.4	120.3	124.7
67.5°	14.2	20.8	28.4	33.9	39.4	53.6	67.8	78.7	90.8	98.4	103.9
70°	9.8	14.2	20.8	25.2	29.5	40.5	51.4	61.2	70.0	75.5	79.8
72.5°	7.7	9.8	14.2	17.5	20.8	28.4	37.2	44.8	51.4	55.8	60.1
75°	4.4	6.6	9.8	12.0	14.2	19.7	25.2	30.6	35.0	38.3	40.5
77.5°	2.2	3.3	5.5	6.6	8.7	12.0	16.4	19.7	23.0	25.2	27.3
80°	2.2	2.2	3.3	3.3	4.4	6.6	8.7	10.9	13.1	15.3	16.4
82.5°	1.1	1.1	2.2	2.2	2.2	3.3	4.4	6.6	7.7	8.7	9.8
85°	1.1	1.1	1.1	1.1	1.1	2.2	2.2	3.3	4.4	5.5	5.5
87.5°	0.0	0.0	1.1	1.1	1.1	1.1	1.1	2.2	2.2	2.2	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



TEST NUMBER: P274454

CATALOG NUMBER: LD6B20DE010W2N2765 EU6B1020W2N902765 6LBDW0LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	945.9	945.9	945.9	945.9	945.9	945.9	945.9	945.9
2.5°	942.6	944.8	943.7	945.9	942.6	941.5	943.7	940.4
5°	930.6	931.7	930.6	930.6	928.4	926.2	928.4	925.1
7.5°	912.0	912.0	908.7	908.7	904.3	902.1	902.1	901.0
10°	896.7	893.4	890.1	891.2	884.6	882.5	881.4	880.3
12.5°	889.0	886.8	881.4	881.4	874.8	872.6	871.5	870.4
15°	880.3	875.9	871.5	870.4	865.0	862.8	861.7	859.5
17.5°	865.0	861.7	856.2	856.2	850.7	849.7	847.5	846.4
20°	848.6	844.2	839.8	839.8	833.2	833.2	830.0	831.1
22.5°	825.6	822.3	817.9	817.9	812.5	811.4	808.1	807.0
25°	798.3	793.9	790.6	789.5	785.1	782.9	781.9	779.7
27.5°	762.2	758.9	755.6	753.4	748.0	746.9	743.6	744.7
30°	717.3	715.2	714.1	711.9	705.3	703.1	703.1	699.8
32.5°	668.1	664.8	662.7	659.4	653.9	652.8	649.5	650.6
35°	608.0	603.6	600.3	601.4	594.9	593.8	591.6	592.7
37.5°	545.7	541.3	536.9	535.8	530.3	530.3	527.1	527.1
40°	481.1	476.8	474.6	474.6	468.0	469.1	465.8	464.7
42.5°	423.2	418.8	417.7	416.6	413.3	412.3	409.0	410.1
45°	368.5	367.4	367.4	365.2	361.9	360.9	361.9	361.9
47.5°	320.4	321.5	320.4	320.4	318.2	320.4	318.2	319.3
50°	279.9	282.1	282.1	282.1	281.0	282.1	282.1	283.2
52.5°	246.0	249.3	248.2	249.3	248.2	250.4	249.3	250.4
55°	216.5	218.7	219.8	220.9	220.9	220.9	220.9	220.9
57.5°	189.2	192.5	193.5	194.6	194.6	196.8	194.6	194.6
60°	167.3	170.6	171.7	172.8	172.8	173.9	171.7	172.8
62.5°	147.6	150.9	150.9	152.0	152.0	152.0	149.8	150.9
65°	127.9	129.0	130.1	130.1	129.0	129.0	127.9	129.0
67.5°	106.1	107.2	106.1	106.1	105.0	105.0	102.8	103.9
70°	82.0	82.0	83.1	82.0	80.9	82.0	80.9	79.8
72.5°	61.2	61.2	61.2	60.1	60.1	59.0	60.1	60.1
75°	41.6	41.6	42.6	42.6	42.6	42.6	41.6	41.6
77.5°	27.3	27.3	27.3	27.3	28.4	27.3	27.3	27.3
80°	17.5	17.5	18.6	18.6	17.5	17.5	17.5	17.5
82.5°	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
85°	6.6	6.6	6.6	6.6	5.5	5.5	5.5	5.5
87.5°	3.3	3.3	3.3	3.3	3.3	3.3	2.2	2.2
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)