

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: P274448

Luminaire Tested: **LD6B20DE010W2N2765 EU6B1020W2N902765 6LBSW0H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P274448
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: LD6B20DE010W2N2765 EU6B1020W2N902765 6LBSW0H
Description: PORTFOLIO 6" W2N RN DOWNLIGHT, SINGLE WALLWASH WITH HAZE FINISH
Light Source: W2N 2700K-6500K CCT TUNING RANGE
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1609.9 lumens
Efficiency: N/A
Efficacy: 57.5 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

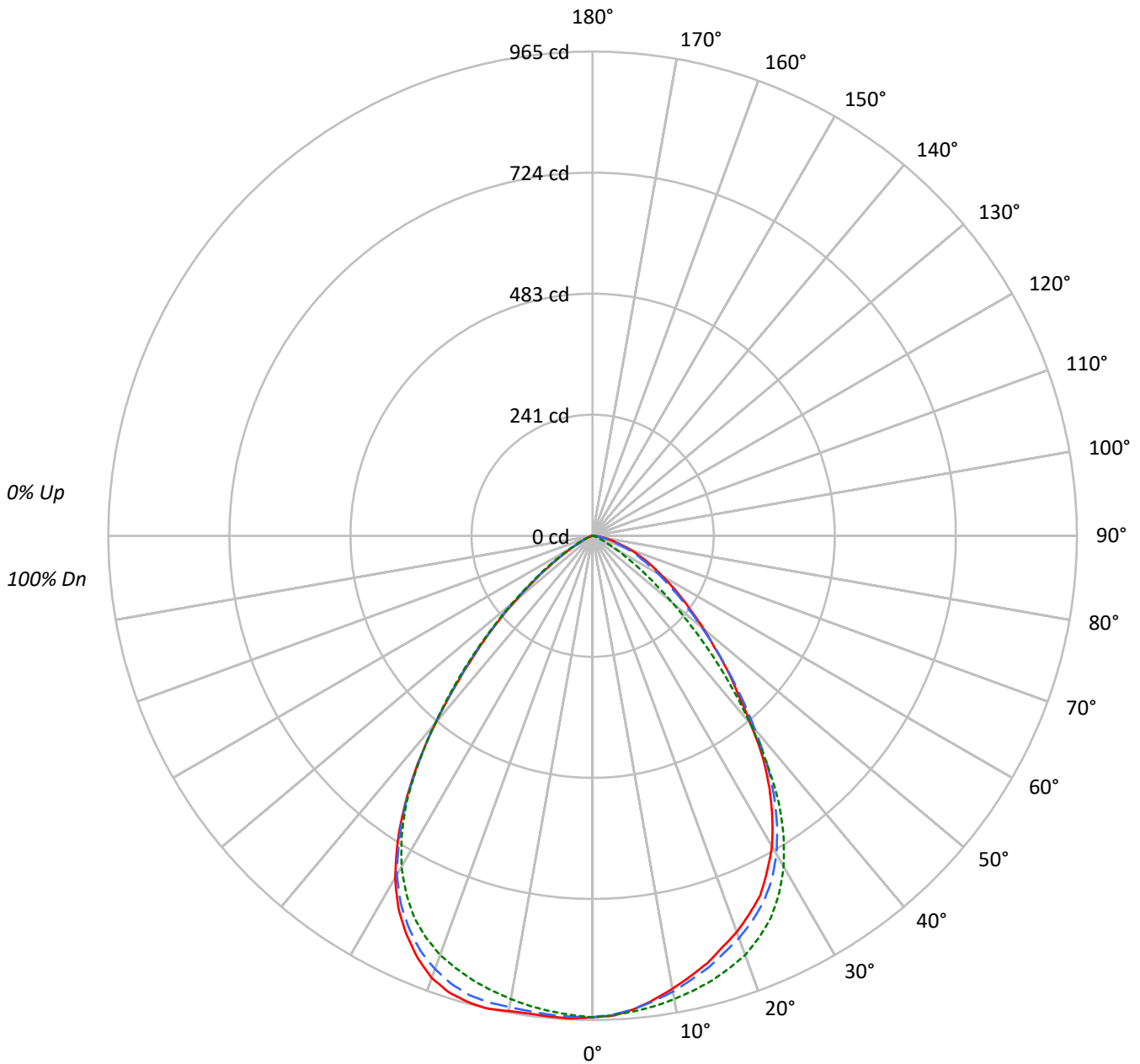
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	62605	62605	62605
5°	62012	62314	62995
10°	60729	62113	63723
15°	59572	61997	64969
20°	58333	61714	65095
25°	56897	60482	63152
30°	53871	57359	59280
35°	48917	51410	51872
40°	41748	41552	41356
45°	35070	31121	30152
50°	29292	21061	19995
55°	24648	12921	11727
60°	20864	6811	5898
65°	18077	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°	258.9	16.1
20°-30°	382.4	23.8
30°-40°	394.1	24.5
40°-50°	272.2	16.9
50°-60°	134.2	8.3
60°-70°	54.4	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°	731.8	45.5
0°-40°	1125.8	69.9
0°-60°	1532.2	95.2
0°-90°	1609.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1609.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	960	960	960	960	960	
5°	947	947	952	958	962	89
15°	882	891	918	948	962	248
25°	790	806	840	865	877	361
35°	614	629	646	649	651	381
45°	380	382	337	333	327	294
55°	217	209	114	107	103	196
65°	117	106	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°	959.6	959.6	959.6	959.6	959.6	959.6	959.6	959.6	959.6	959.6	959.6
2.5°	957.3	953.8	956.1	951.5	957.3	951.5	952.6	953.8	952.6	953.8	955.0
5°	946.9	943.4	946.9	941.1	946.9	943.4	943.4	944.5	944.5	945.7	946.9
7.5°	932.9	929.5	932.9	927.2	934.1	930.6	930.6	932.9	931.8	932.9	935.3
10°	916.7	912.1	915.6	912.1	919.0	914.4	916.7	916.7	916.7	920.2	922.5
12.5°	899.3	894.7	899.3	893.5	900.5	897.0	898.2	901.7	902.8	905.1	906.3
15°	882.0	876.2	878.5	875.0	882.0	878.5	879.6	884.3	884.3	887.7	891.2
17.5°	859.9	855.3	859.9	855.3	861.1	858.8	861.1	864.6	864.6	868.0	871.5
20°	840.2	835.6	839.1	835.6	842.5	839.1	840.2	844.9	846.0	849.5	853.0
22.5°	815.9	812.4	814.7	811.3	818.2	815.9	817.1	821.7	822.8	825.2	831.0
25°	790.4	783.4	786.9	784.6	791.6	788.1	790.4	795.0	797.3	800.8	805.5
27.5°	753.3	749.8	752.2	752.2	757.9	754.5	755.6	760.3	763.7	767.2	773.0
30°	715.1	709.3	711.6	712.7	717.4	715.1	717.4	722.0	723.2	727.8	732.4
32.5°	666.4	664.1	668.7	666.4	668.7	668.7	669.9	673.3	675.7	678.0	683.8
35°	614.2	609.6	614.2	611.9	617.7	614.2	617.7	621.2	621.2	625.8	629.3
37.5°	557.4	551.7	554.0	554.0	556.3	555.1	555.1	560.9	562.1	565.6	569.0
40°	490.2	487.9	492.5	491.4	492.5	492.5	493.7	497.2	499.5	500.7	501.8
42.5°	430.0	431.1	432.3	432.3	432.3	432.3	432.3	436.9	435.8	439.2	440.4
45°	380.1	375.5	377.8	376.7	380.1	376.7	380.1	383.6	381.3	384.8	382.4
47.5°	329.1	329.1	329.1	328.0	330.3	329.1	331.5	332.6	332.6	332.6	331.5
50°	288.6	285.1	286.3	286.3	287.4	286.3	288.6	289.7	289.7	287.4	282.8
52.5°	249.2	248.0	248.0	250.3	250.3	249.2	249.2	249.2	249.2	245.7	243.4
55°	216.7	214.4	215.6	215.6	215.6	215.6	216.7	215.6	215.6	212.1	208.6
57.5°	187.7	185.4	185.4	185.4	186.6	185.4	185.4	185.4	184.3	180.8	176.2
60°	159.9	158.8	159.9	159.9	161.1	159.9	159.9	159.9	157.6	154.1	149.5
62.5°	136.8	136.8	136.8	137.9	137.9	136.8	136.8	135.6	134.4	129.8	125.2
65°	117.1	115.9	117.1	117.1	118.2	118.2	117.1	115.9	114.7	110.1	105.5
67.5°	97.4	96.2	97.4	97.4	98.5	97.4	97.4	97.4	93.9	91.6	86.9
70°	78.8	77.6	77.6	77.6	78.8	76.5	77.6	77.6	75.3	71.9	67.2
72.5°	60.3	60.3	60.3	60.3	60.3	60.3	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°	32.5	32.5	32.5	32.5	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	7.0	7.0
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°	959.6	959.6	959.6	959.6	959.6	959.6	959.6	959.6	959.6	959.6	959.6
2.5°	955.0	955.0	957.3	953.8	959.6	956.1	955.0	960.8	957.3	956.1	958.4
5°	946.9	948.0	949.2	946.9	952.6	949.2	949.2	955.0	952.6	951.5	955.0
7.5°	936.4	937.6	939.9	938.7	943.4	941.1	942.2	948.0	945.7	945.7	949.2
10°	923.7	926.0	928.3	928.3	934.1	931.8	931.8	938.7	936.4	937.6	942.2
12.5°	908.6	912.1	915.6	916.7	922.5	919.0	920.2	928.3	927.2	928.3	932.9
15°	892.4	897.0	900.5	900.5	907.4	904.0	907.4	915.6	913.2	917.9	923.7
17.5°	873.8	878.5	883.1	884.3	891.2	888.9	893.5	901.7	901.7	904.0	910.9
20°	856.5	862.3	864.6	868.0	875.0	873.8	876.2	885.4	885.4	888.9	895.9
22.5°	833.3	839.1	843.7	847.2	853.0	853.0	856.5	864.6	864.6	866.9	873.8
25°	807.8	814.7	818.2	821.7	827.5	826.3	829.8	836.8	837.9	840.2	847.2
27.5°	775.3	781.1	785.8	788.1	796.2	791.6	795.0	803.1	802.0	804.3	810.1
30°	734.8	740.6	745.2	745.2	752.2	752.2	755.6	759.1	759.1	761.4	766.1
32.5°	687.3	694.2	694.2	697.7	702.3	697.7	702.3	707.0	704.6	708.1	711.6
35°	632.8	636.3	637.4	637.4	640.9	639.7	638.6	642.1	639.7	645.5	649.0
37.5°	566.7	571.4	569.0	571.4	570.2	566.7	566.7	572.5	567.9	569.0	572.5
40°	503.0	503.0	501.8	496.0	497.2	493.7	492.5	493.7	489.1	487.9	492.5
42.5°	436.9	435.8	432.3	424.2	425.3	419.5	414.9	414.9	412.6	411.4	412.6
45°	377.8	374.3	368.5	359.3	357.0	352.3	343.0	340.7	337.3	337.3	338.4
47.5°	323.3	318.7	309.4	299.0	293.2	287.4	278.1	274.7	268.9	266.6	268.9
50°	278.1	270.0	258.4	243.4	237.6	230.6	221.4	215.6	209.8	207.5	206.3
52.5°	236.4	224.8	213.2	194.7	190.1	183.1	170.4	164.6	158.8	154.1	154.1
55°	200.5	190.1	173.8	156.5	149.5	142.5	129.8	121.7	115.9	113.6	111.3
57.5°	168.0	156.5	141.4	122.8	115.9	108.9	96.2	88.1	82.3	78.8	76.5
60°	141.4	128.6	113.6	97.4	89.2	82.3	69.5	61.4	55.6	52.2	49.8
62.5°	115.9	105.5	90.4	75.3	68.4	61.4	51.0	42.9	37.1	34.8	31.3
65°	97.4	86.9	73.0	60.3	54.5	47.5	38.2	31.3	26.7	23.2	20.9
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°	62.6	54.5	45.2	35.9	32.5	27.8	22.0	16.2	13.9	11.6	10.4
72.5°	46.4	40.6	33.6	26.7	23.2	20.9	15.1	12.7	9.3	8.1	7.0
75°	33.6	29.0	24.3	18.5	16.2	15.1	11.6	8.1	7.0	5.8	4.6
77.5°	23.2	20.9	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	7.0	4.6	3.5	3.5	2.3	2.3
82.5°	9.3	8.1	7.0	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°	959.6	959.6	959.6	959.6	959.6	959.6	959.6	959.6	959.6	959.6	959.6
2.5°	958.4	958.4	960.8	957.3	959.6	959.6	961.9	957.3	959.6	960.8	963.1
5°	953.8	955.0	957.3	956.1	957.3	957.3	959.6	953.8	958.4	958.4	961.9
7.5°	949.2	949.2	951.5	950.3	952.6	953.8	956.1	951.5	956.1	956.1	959.6
10°	943.4	943.4	946.9	945.7	949.2	950.3	953.8	949.2	953.8	955.0	958.4
12.5°	935.3	936.4	939.9	939.9	943.4	945.7	949.2	946.9	952.6	953.8	958.4
15°	926.0	928.3	932.9	931.8	935.3	938.7	943.4	939.9	948.0	950.3	955.0
17.5°	914.4	916.7	920.2	920.2	923.7	926.0	931.8	929.5	936.4	937.6	943.4
20°	897.0	900.5	905.1	904.0	907.4	909.8	914.4	912.1	919.0	921.4	927.2
22.5°	876.2	878.5	882.0	882.0	885.4	887.7	892.4	888.9	895.9	897.0	901.7
25°	848.3	850.7	853.0	854.1	857.6	858.8	861.1	858.8	864.6	865.7	871.5
27.5°	812.4	813.6	817.1	817.1	819.4	820.5	824.0	819.4	827.5	827.5	831.0
30°	769.5	768.4	773.0	770.7	773.0	773.0	776.5	774.2	780.0	777.6	781.1
32.5°	712.7	715.1	715.1	712.7	717.4	716.2	716.2	713.9	717.4	718.5	720.9
35°	646.7	650.2	650.2	651.3	652.5	649.0	650.2	643.2	649.0	650.2	651.3
37.5°	574.8	571.4	573.7	570.2	576.0	569.0	569.0	564.4	569.0	569.0	570.2
40°	492.5	491.4	493.7	491.4	490.2	489.1	486.8	483.3	487.9	485.6	489.1
42.5°	414.9	413.7	413.7	411.4	410.3	410.3	407.9	405.6	404.5	404.5	410.3
45°	334.9	337.3	334.9	333.8	336.1	333.8	334.9	330.3	332.6	330.3	332.6
47.5°	267.7	268.9	266.6	264.2	267.7	264.2	264.2	260.8	265.4	265.4	263.1
50°	207.5	206.3	204.0	206.3	205.1	205.1	205.1	201.7	204.0	200.5	202.8
52.5°	153.0	151.8	151.8	150.7	151.8	150.7	150.7	149.5	149.5	148.3	149.5
55°	111.3	110.1	107.8	107.8	107.8	108.9	107.8	106.6	106.6	105.5	106.6
57.5°	75.3	73.0	73.0	73.0	73.0	71.9	71.9	70.7	71.9	70.7	71.9
60°	48.7	48.7	46.4	46.4	46.4	46.4	46.4	45.2	46.4	46.4	46.4
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°	959.6	959.6	959.6	959.6	959.6	959.6	959.6	959.6
2.5°	959.6	960.8	958.4	959.6	957.3	959.6	960.8	963.1
5°	957.3	958.4	956.1	958.4	956.1	958.4	959.6	961.9
7.5°	955.0	957.3	955.0	957.3	955.0	957.3	958.4	960.8
10°	955.0	958.4	956.1	959.6	956.1	958.4	960.8	961.9
12.5°	955.0	958.4	957.3	959.6	958.4	960.8	963.1	965.4
15°	952.6	956.1	953.8	957.3	956.1	957.3	961.9	961.9
17.5°	939.9	943.4	943.4	945.7	945.7	949.2	951.5	953.8
20°	923.7	927.2	926.0	929.5	929.5	932.9	935.3	937.6
22.5°	899.3	904.0	902.8	906.3	905.1	907.4	912.1	910.9
25°	868.0	873.8	872.7	875.0	873.8	873.8	876.2	877.3
27.5°	829.8	833.3	832.1	834.4	832.1	834.4	836.8	837.9
30°	780.0	782.3	781.1	782.3	781.1	783.4	784.6	786.9
32.5°	719.7	723.2	719.7	722.0	720.9	720.9	725.5	723.2
35°	647.8	649.0	650.2	650.2	647.8	649.0	651.3	651.3
37.5°	567.9	573.7	566.7	570.2	569.0	569.0	569.0	572.5
40°	484.4	485.6	483.3	483.3	483.3	482.1	486.8	485.6
42.5°	405.6	406.8	405.6	402.2	403.3	403.3	406.8	402.2
45°	329.1	331.5	330.3	330.3	328.0	328.0	329.1	326.8
47.5°	260.8	263.1	259.6	260.8	258.4	260.8	259.6	261.9
50°	198.2	200.5	199.3	200.5	200.5	198.2	201.7	197.0
52.5°	148.3	149.5	148.3	147.2	146.0	146.0	148.3	147.2
55°	105.5	104.3	104.3	104.3	105.5	105.5	104.3	103.1
57.5°	70.7	70.7	69.5	69.5	70.7	68.4	69.5	68.4
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)