

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: P252149

Luminaire Tested: **LD6B15D010 EU6B10209035 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252149
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-1)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B15D010 EU6B10209035 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1617.0 lumens
Efficiency: N/A
Efficacy: 112.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

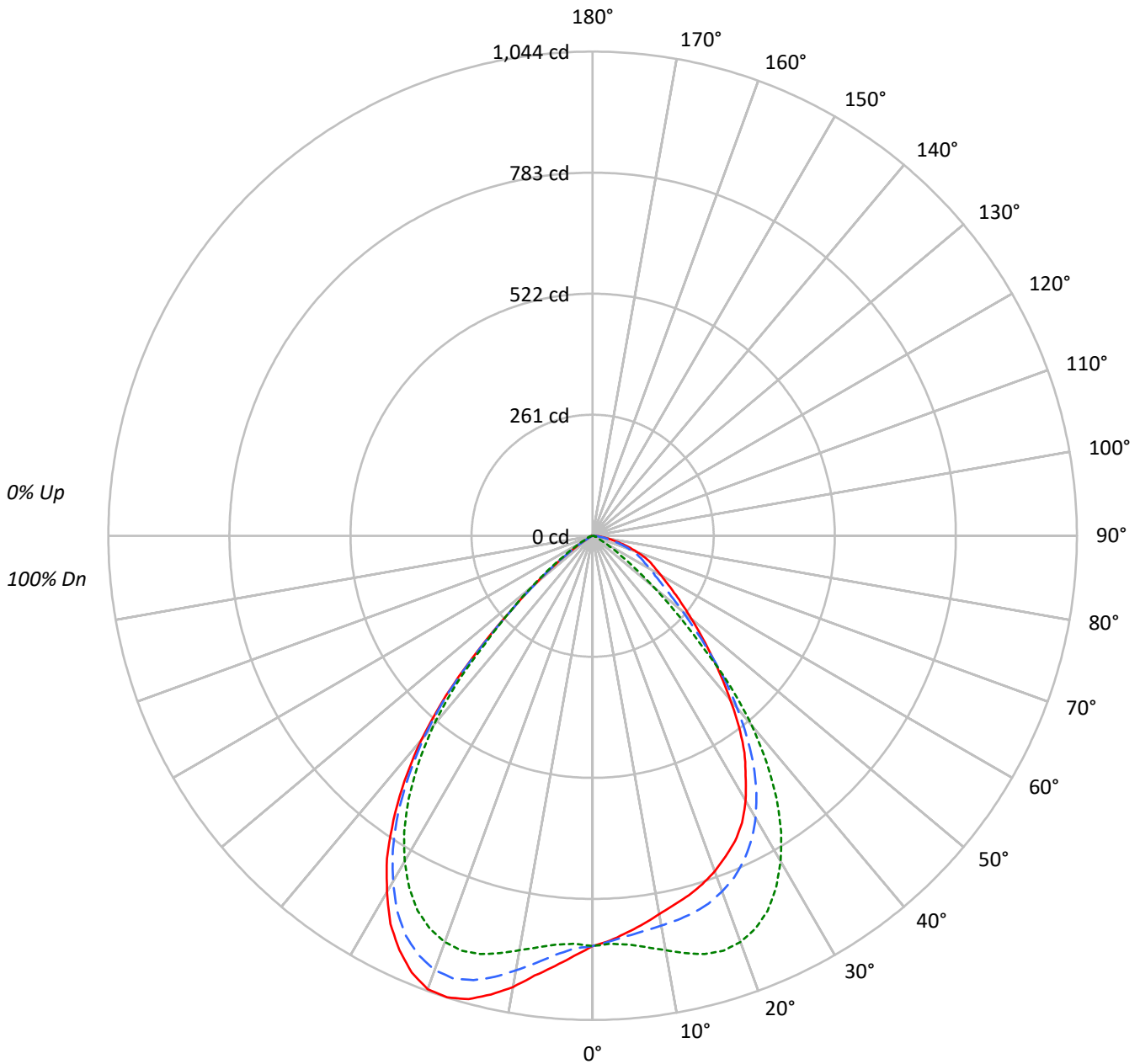
Input Watts (W): 14.39
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90																			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80																			
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72																			
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65																			
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58																			
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53																			
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	50	48																			
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44																			
9	66	54	47	42	64	54	47	42	53	46	42	52	46	42	51	45	42	40																			
10	62	50	43	39	61	50	43	39	49	43	39	48	43	39	47	42	38	37																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	57712	57712	57712
5°	56216	57932	60978
10°	54853	60119	65439
15°	54209	63064	69859
20°	53432	64707	72219
25°	52297	64225	70927
30°	49697	61035	66768
35°	45469	55034	59614
40°	39329	45453	48902
45°	33160	29811	31988
50°	28155	17254	16219
55°	24432	8269	6256
60°	22064	3862	1540
65°	21411	2223	525
70°	19190	1774	477
75°	15780	1286	202
80°	11760	639	0
85°	10105	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.4	5.3
10°-20°	260.4	16.1
20°-30°	397.9	24.6
30°-40°	416.1	25.7
40°-50°	270.0	16.7
50°-60°	107.2	6.6
60°-70°	50.8	3.1
70°-80°	24.2	1.5
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°	743.7	46.0
0°-40°	1159.9	71.7
0°-60°	1537.0	95.1
0°-90°	1617.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1617.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	885	885	885	885	885	
5°	858	866	885	907	931	81
15°	803	842	934	992	1034	226
25°	726	772	892	952	985	333
35°	571	606	691	732	748	353
45°	359	356	323	342	347	280
55°	215	183	73	57	55	195
65°	139	115	14	3	3	135
75°	63	51	5	2	1	67
85°	14	8	0	0	0	16
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°	884.6	884.6	884.6	884.6	884.6	884.6	884.6	884.6	884.6	884.6	884.6
2.5°	873.6	875.3	866.0	863.5	870.2	872.8	873.6	871.1	871.9	875.3	875.3
5°	858.4	860.1	851.6	849.1	855.9	857.6	860.1	859.3	861.8	866.9	866.0
7.5°	844.0	846.6	837.3	833.9	842.3	846.6	848.3	848.3	851.6	858.4	859.3
10°	828.0	831.3	822.9	821.2	830.5	834.7	835.6	837.3	842.3	851.6	853.3
12.5°	814.4	817.8	811.9	809.4	819.5	823.7	825.4	828.8	834.7	846.6	848.3
15°	802.6	805.1	798.4	796.7	806.8	811.9	812.7	817.8	825.4	839.0	841.5
17.5°	787.4	789.1	784.0	782.3	792.4	797.5	798.4	804.3	813.6	827.1	831.3
20°	769.6	771.3	766.2	764.5	774.7	780.6	781.4	786.5	797.5	811.9	816.1
22.5°	748.5	751.8	745.9	744.2	754.4	759.5	762.0	766.2	777.2	791.6	797.5
25°	726.5	726.5	722.2	721.4	730.7	736.6	735.8	741.7	752.7	767.1	772.1
27.5°	697.7	696.9	692.6	691.8	702.0	707.0	705.3	711.3	721.4	735.8	740.9
30°	659.7	661.4	655.4	653.7	662.2	670.7	669.8	675.7	685.9	699.4	702.8
32.5°	614.0	615.7	614.8	612.3	619.9	624.1	626.7	630.9	639.4	653.7	657.1
35°	570.9	568.3	564.9	564.9	572.6	579.3	576.8	581.9	590.3	604.7	605.5
37.5°	517.6	516.7	515.0	513.4	521.8	523.5	524.3	527.7	535.3	547.2	545.5
40°	461.8	462.6	461.8	458.4	463.5	470.2	469.4	471.1	477.8	486.3	483.8
42.5°	409.3	409.3	409.3	405.9	411.9	415.3	416.9	416.1	417.8	425.4	422.0
45°	359.4	360.3	359.4	358.6	359.4	361.1	359.4	358.6	358.6	361.1	356.0
47.5°	316.3	316.3	313.8	311.2	313.8	314.6	312.1	309.5	308.7	307.8	299.4
50°	277.4	276.6	275.7	271.5	274.0	274.9	271.5	269.8	266.4	262.2	252.0
52.5°	243.6	242.7	241.9	237.6	239.3	240.2	236.8	233.4	229.2	225.8	213.1
55°	214.8	214.0	214.0	211.4	209.7	211.4	208.0	205.5	199.6	195.4	182.7
57.5°	190.3	190.3	188.6	186.1	186.9	186.9	183.5	180.1	175.1	170.0	159.8
60°	169.1	169.1	169.1	166.6	166.6	166.6	164.9	161.5	157.3	152.2	142.1
62.5°	152.2	152.2	151.4	148.8	149.7	149.7	148.0	144.6	140.4	137.0	126.9
65°	138.7	138.7	138.7	136.2	136.2	137.0	135.3	131.9	128.5	124.3	115.0
67.5°	121.8	120.9	120.9	119.2	120.1	120.9	119.2	116.7	112.5	109.9	101.5
70°	100.6	101.5	102.3	99.8	100.6	100.6	99.8	97.3	94.7	92.2	84.6
72.5°	82.0	82.0	81.2	80.3	80.3	81.2	79.5	77.0	75.3	73.6	67.7
75°	62.6	61.7	62.6	60.9	60.9	60.9	59.2	58.4	57.5	55.0	50.7
77.5°	45.7	44.8	44.8	43.1	44.0	44.0	43.1	41.4	39.7	38.9	35.5
80°	31.3	31.3	31.3	30.4	30.4	29.6	29.6	28.8	27.1	26.2	24.5
82.5°	21.1	21.1	21.1	20.3	20.3	20.3	19.5	18.6	17.8	16.9	15.2
85°	13.5	13.5	13.5	12.7	12.7	12.7	11.8	11.8	11.0	10.1	8.5
87.5°	7.6	7.6	7.6	6.8	6.8	6.8	6.8	6.8	5.9	5.1	4.2
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°	884.6	884.6	884.6	884.6	884.6	884.6	884.6	884.6	884.6	884.6	884.6
2.5°	881.2	869.4	877.0	877.0	874.5	881.2	885.5	888.9	888.0	880.4	879.6
5°	874.5	864.3	872.8	873.6	871.1	880.4	886.3	890.5	891.4	884.6	885.5
7.5°	869.4	860.9	871.9	875.3	874.5	882.9	889.7	896.5	899.8	894.8	895.6
10°	866.9	860.1	871.9	877.0	877.9	887.2	897.3	906.6	910.8	907.5	910.0
12.5°	863.5	859.3	872.8	880.4	883.8	893.1	905.8	916.8	923.5	921.8	926.9
15°	860.1	856.7	872.8	883.8	888.0	896.5	910.8	926.9	934.5	933.7	940.4
17.5°	851.6	850.8	867.7	879.6	885.5	895.6	909.2	928.6	936.2	937.9	946.4
20°	838.1	838.1	856.7	869.4	876.2	885.5	902.4	921.0	930.3	932.0	941.3
22.5°	819.5	821.2	839.0	851.6	861.8	868.6	886.3	905.8	914.2	916.8	926.9
25°	795.0	796.7	813.6	826.3	837.3	844.9	861.8	879.6	889.7	892.2	899.8
27.5°	762.8	766.2	782.3	795.0	804.3	809.4	827.1	845.7	853.3	855.9	863.5
30°	725.6	726.5	742.5	753.5	762.8	767.1	782.3	801.7	807.7	810.2	821.2
32.5°	680.0	679.1	694.3	704.5	712.1	717.2	733.2	745.9	751.8	756.1	762.0
35°	625.0	624.1	635.1	647.0	652.9	654.6	670.7	684.2	687.6	691.0	698.6
37.5°	563.3	563.3	572.6	578.5	585.2	587.8	595.4	610.6	616.5	615.7	621.6
40°	498.1	494.7	501.5	507.4	509.1	510.0	517.6	529.4	533.7	533.7	537.9
42.5°	429.6	424.6	425.4	428.8	430.5	424.6	429.6	437.2	434.7	438.1	438.9
45°	356.9	349.3	345.9	338.3	340.0	334.1	330.7	332.4	331.5	323.1	324.8
47.5°	297.7	284.2	278.2	267.2	264.7	257.9	253.7	246.1	239.3	239.3	235.1
50°	247.8	234.3	222.4	209.7	205.5	199.6	190.3	180.1	175.1	170.0	165.8
52.5°	208.0	193.7	179.3	165.8	159.8	152.2	139.5	129.4	120.1	115.0	109.9
55°	175.9	159.8	144.6	130.2	122.6	115.0	102.3	90.5	79.5	72.7	68.5
57.5°	151.4	136.2	120.1	104.9	98.1	89.6	76.1	63.4	53.3	45.7	41.4
60°	133.6	118.4	104.0	88.0	81.2	72.7	58.4	46.5	36.4	29.6	24.5
62.5°	118.4	104.9	89.6	75.3	68.5	60.0	46.5	34.7	25.4	18.6	14.4
65°	107.4	93.9	81.2	66.8	60.9	52.4	39.7	28.8	20.3	14.4	10.1
67.5°	94.7	82.9	70.2	58.4	52.4	45.7	33.8	24.5	16.9	11.8	8.5
70°	79.5	70.2	59.2	48.2	44.0	38.1	27.9	20.3	13.5	9.3	6.8
72.5°	63.4	55.8	47.4	38.9	35.5	29.6	22.8	16.1	10.1	6.8	5.1
75°	48.2	42.3	35.5	29.6	26.2	22.8	16.9	11.8	7.6	5.1	3.4
77.5°	33.0	30.4	25.4	20.3	18.6	16.1	11.0	7.6	5.1	3.4	1.7
80°	22.8	20.3	16.9	13.5	11.8	10.1	6.8	5.1	2.5	1.7	0.8
82.5°	14.4	11.8	10.1	8.5	7.6	5.9	4.2	2.5	1.7	0.8	0.8
85°	7.6	6.8	5.9	4.2	4.2	3.4	2.5	1.7	0.8	0.0	0.0
87.5°	4.2	3.4	2.5	1.7	1.7	0.8	0.8	0.8	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°	884.6	884.6	884.6	884.6	884.6	884.6	884.6	884.6	884.6	884.6	884.6
2.5°	889.7	889.7	888.9	899.0	887.2	899.0	893.1	899.0	890.5	889.7	890.5
5°	896.5	899.0	899.8	909.2	898.2	912.5	907.5	912.5	906.6	908.3	910.8
7.5°	910.0	914.2	913.4	925.2	914.2	930.3	926.9	934.5	928.6	930.3	933.7
10°	925.2	930.3	931.1	943.0	932.8	952.3	948.1	956.5	951.4	954.0	958.2
12.5°	943.0	948.9	949.7	963.3	952.3	972.6	970.0	978.5	974.3	976.8	981.9
15°	956.5	965.0	966.7	980.2	968.4	989.5	987.8	998.8	992.0	996.3	1000.5
17.5°	963.3	970.9	974.3	987.0	976.8	998.0	996.3	1005.6	1000.5	1004.7	1009.8
20°	959.1	968.4	970.9	983.6	973.4	994.6	992.0	1001.3	996.3	999.6	1004.7
22.5°	943.8	953.1	956.5	968.4	959.1	978.5	977.7	986.1	979.3	983.6	987.8
25°	916.8	926.9	928.6	939.6	929.4	949.7	948.1	957.4	952.3	954.8	960.7
27.5°	877.9	889.7	892.2	901.5	893.9	910.8	910.8	918.5	912.5	912.5	918.5
30°	831.3	843.2	844.9	852.5	845.7	860.9	861.8	869.4	860.1	865.2	866.0
32.5°	774.7	782.3	787.4	794.1	784.0	803.4	800.9	806.8	801.7	801.7	806.0
35°	706.2	715.5	718.0	726.5	718.0	733.2	733.2	736.6	731.6	731.6	738.3
37.5°	631.8	638.5	639.4	647.8	641.1	653.7	652.9	655.4	650.4	653.7	653.7
40°	544.6	549.7	551.4	555.6	554.8	564.1	563.3	564.9	562.4	563.3	564.9
42.5°	443.2	449.9	453.3	456.7	451.6	464.3	461.8	464.3	463.5	464.3	466.8
45°	326.4	331.5	334.1	334.9	333.2	340.8	346.7	341.7	342.5	340.8	344.2
47.5°	236.0	236.8	235.1	240.2	236.0	239.3	241.0	241.9	236.8	236.0	239.3
50°	161.5	165.8	159.8	162.4	161.5	164.9	163.2	164.1	159.0	161.5	159.8
52.5°	107.4	106.6	104.9	105.7	104.0	104.0	104.0	105.7	102.3	100.6	98.9
55°	65.1	63.4	60.0	59.2	59.2	60.0	58.4	56.7	56.7	55.8	55.8
57.5°	38.1	35.5	33.8	33.0	31.3	30.4	29.6	29.6	27.9	27.9	27.9
60°	21.1	18.6	16.9	15.2	15.2	14.4	13.5	12.7	12.7	12.7	11.8
62.5°	11.0	9.3	7.6	6.8	6.8	5.9	5.1	5.1	5.1	5.1	4.2
65°	7.6	5.9	5.1	4.2	4.2	3.4	3.4	3.4	3.4	3.4	3.4
67.5°	5.9	5.1	4.2	3.4	3.4	3.4	2.5	2.5	2.5	2.5	2.5
70°	5.1	3.4	3.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
72.5°	3.4	3.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
75°	2.5	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
77.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0
80°	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	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	0.0	0.0	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):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	884.6	884.6	884.6	884.6	884.6	884.6	884.6	884.6
2.5°	898.2	897.3	898.2	899.8	896.5	906.6	901.5	906.6
5°	917.6	918.5	919.3	921.8	917.6	930.3	923.5	931.1
7.5°	943.0	943.8	944.7	947.2	944.7	957.4	949.7	956.5
10°	969.2	970.9	970.9	975.1	972.6	984.4	979.3	987.8
12.5°	993.7	995.4	997.1	999.6	998.0	1010.6	1006.4	1013.2
15°	1013.2	1016.6	1017.4	1020.8	1019.1	1032.6	1027.6	1034.3
17.5°	1022.5	1025.9	1025.9	1030.1	1028.4	1042.8	1036.0	1043.6
20°	1017.4	1019.9	1020.8	1025.0	1023.3	1037.7	1030.9	1040.2
22.5°	1001.3	1002.2	1003.0	1007.3	1006.4	1019.1	1013.2	1019.1
25°	971.7	974.3	973.4	976.8	976.8	987.0	980.2	985.3
27.5°	929.4	932.0	932.0	936.2	932.8	943.0	936.2	943.8
30°	877.9	880.4	878.7	882.1	878.7	888.9	883.8	886.3
32.5°	816.1	816.1	817.0	817.8	816.1	825.4	820.4	825.4
35°	742.5	744.2	745.1	745.9	744.2	751.0	745.1	748.5
37.5°	659.7	663.9	663.0	663.9	661.4	669.8	664.7	666.4
40°	570.9	570.9	570.0	571.7	569.2	575.9	572.6	574.2
42.5°	467.7	470.2	466.8	471.1	464.3	473.6	470.2	467.7
45°	351.0	347.6	346.7	347.6	345.1	345.9	348.4	346.7
47.5°	239.3	239.3	237.6	235.1	238.5	239.3	236.0	236.0
50°	160.7	160.7	159.0	158.2	159.8	159.0	157.3	159.8
52.5°	102.3	98.9	98.9	100.6	98.9	97.3	99.8	98.1
55°	55.8	54.1	54.1	55.8	54.1	54.1	53.3	55.0
57.5°	27.1	27.9	27.1	27.1	27.1	27.1	26.2	27.1
60°	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8
62.5°	5.1	5.1	4.2	4.2	4.2	4.2	4.2	4.2
65°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
67.5°	2.5	2.5	2.5	2.5	2.5	3.4	2.5	2.5
70°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
72.5°	2.5	2.5	3.4	3.4	3.4	3.4	3.4	3.4
75°	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	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



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— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)