

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: P135916

Luminaire Tested: **LD6A15D010TE ERM6A15927 6LM121H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P135916  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23373)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD6A15D010TE ERM6A15927 6LM121H  
Description: PORTFOLIO 6 INCH 50 DEGREE CUTOFF RECESSED DOUBLE WALL WASH LUMINAIRE  
SEMI-SPECULAR CLEAR TRIM AND SPECULAR CLEAR KICKER  
Light Source: (1) HIGH LUMEN LED 2700K  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

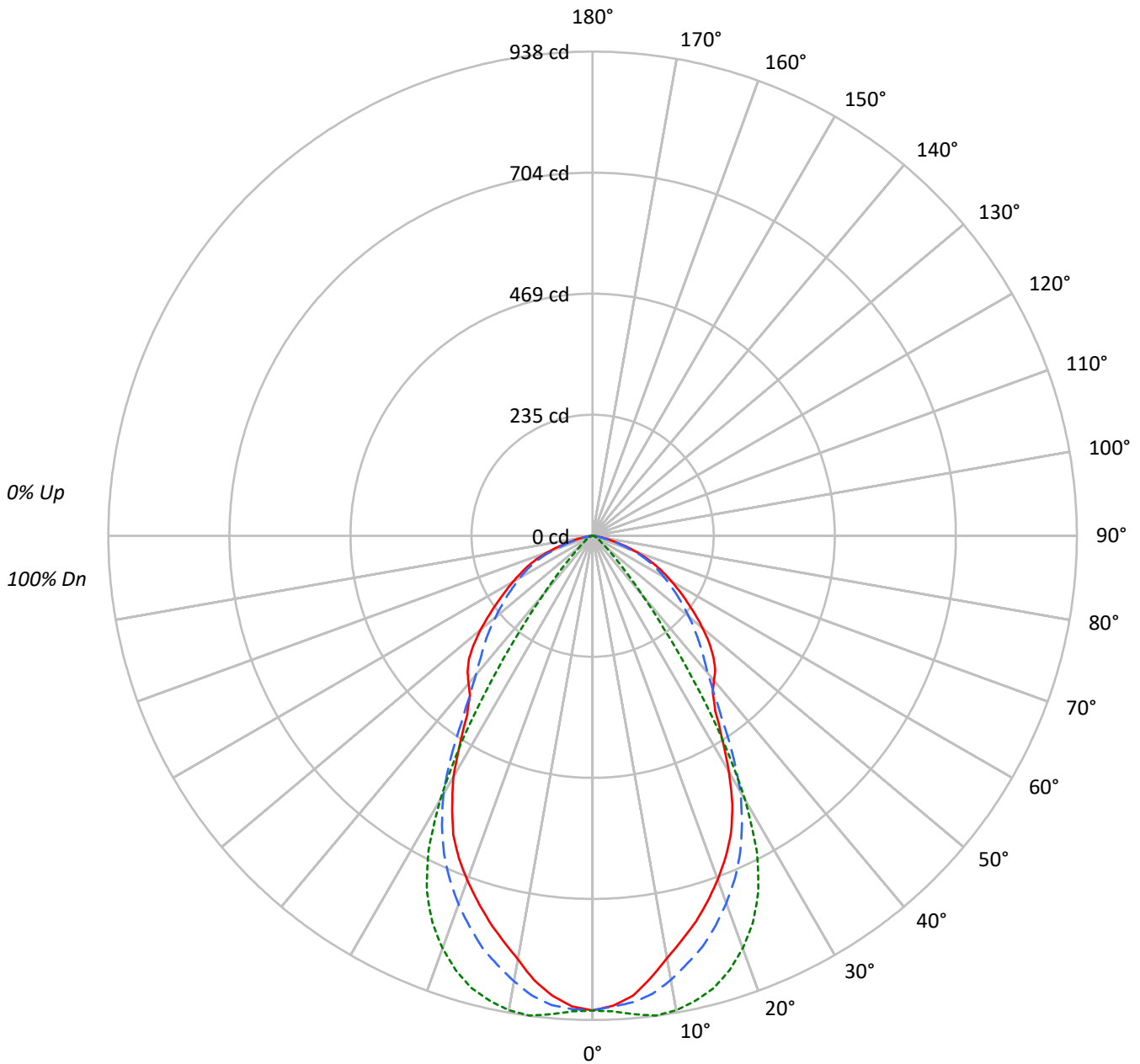
Lumens per Lamp: N/A  
Luminaire Lumens: 1329.0 lumens  
Efficiency: N/A  
Efficacy: 58.8 lumens/watt  
Spacing Criteria (0/90/45): 0.96 / 1.06 / 1.01  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 22.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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				
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	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89			89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79			79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70			70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62			62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56			56
6	78	67	60	54	77	66	59	54	65	58	54	63	57	53	62	57	53	51			51
7	74	62	55	49	72	61	54	49	60	53	49	59	53	49	57	52	48	47			47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	48	44	43			43
9	65	54	46	42	64	53	46	41	52	46	41	51	45	41	50	45	41	39			39
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36			36

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	59989	59989	59989
5°	58581	60945	58581
10°	55025	61835	55210
15°	52251	61261	52251
20°	49176	59020	49273
25°	45696	54687	45991
30°	39761	44469	40597
35°	32965	26880	33745
40°	31111	12545	31818
45°	30493	5896	31268
50°	28196	3106	28764
55°	25433	2059	25592
60°	23017	1631	23200
65°	20593	1281	21226
70°	16958	1049	17473
75°	11217	706	11217
80°	6274	526	6274
85°	4117	0	3069



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.8	6.5
10°-20°	232.7	17.5
20°-30°	311.0	23.4
30°-40°	257.2	19.4
40°-50°	184.5	13.9
50°-60°	135.6	10.2
60°-70°	87.6	6.6
70°-80°	31.0	2.3
80°-90°	3.6	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°	629.5	47.4
0°-40°	886.6	66.7
0°-60°	1206.8	90.8
0°-90°	1329.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1329.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	920	920	920	920	920	
5°	894	907	931	912	894	83
15°	774	824	907	826	774	217
25°	635	676	760	681	639	288
35°	414	439	338	443	424	266
45°	330	292	64	296	339	253
55°	224	199	18	201	225	201
65°	133	124	8	125	138	131
75°	44	36	3	36	44	50
85°	6	3	0	3	4	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5
2.5°	911.1	904.2	909.8	904.2	905.6	911.1	912.5	915.3	916.8	912.5	912.5
5°	894.5	887.6	894.5	888.9	891.7	898.7	900.1	905.6	908.4	907.0	909.8
7.5°	863.9	858.4	865.4	861.1	865.4	875.0	879.2	886.2	891.7	894.5	898.7
10°	830.6	825.0	832.0	827.8	834.8	845.8	850.1	858.4	866.8	873.7	880.6
12.5°	801.5	795.9	800.1	798.7	805.6	815.4	822.3	832.0	841.7	848.7	858.4
15°	773.6	768.1	773.6	770.9	776.4	787.5	794.5	804.2	815.4	823.7	834.8
17.5°	741.7	736.2	740.3	738.9	744.5	754.2	761.1	770.9	782.0	791.7	802.8
20°	708.3	702.8	707.0	704.2	709.7	720.9	726.4	737.5	747.3	757.0	766.7
22.5°	673.6	668.1	673.6	669.5	677.9	684.8	690.3	701.4	709.7	719.5	727.9
25°	634.8	629.2	633.4	630.6	636.1	644.5	648.7	659.8	666.7	676.5	684.8
27.5°	586.1	579.2	587.5	582.0	588.9	595.9	600.0	609.8	618.1	626.5	633.4
30°	527.8	522.3	530.6	526.4	534.7	540.4	545.9	555.5	562.5	572.2	573.7
32.5°	466.7	463.9	470.9	468.1	476.4	482.0	486.1	495.9	501.4	507.0	502.8
35°	413.9	411.1	418.0	416.7	423.7	427.8	431.9	437.6	437.6	438.9	427.8
37.5°	381.9	380.6	386.2	384.7	390.3	394.5	394.5	395.8	393.1	386.2	369.5
40°	365.3	363.9	368.1	366.7	370.9	372.3	370.9	368.1	359.7	345.8	323.6
42.5°	351.5	348.6	351.5	350.0	352.8	354.2	350.0	345.8	334.8	318.1	291.7
45°	330.5	327.8	331.9	329.2	331.9	331.9	327.8	322.3	309.7	291.7	263.9
47.5°	305.6	302.8	307.0	304.2	307.0	307.0	302.8	297.2	284.8	266.7	238.9
50°	277.8	275.0	277.8	276.4	279.2	280.5	275.0	270.9	259.7	243.1	215.3
52.5°	250.1	247.2	250.1	250.1	251.4	251.4	247.2	244.4	234.8	219.5	194.4
55°	223.6	220.9	225.0	223.6	225.0	225.0	220.9	218.1	211.1	198.7	175.0
57.5°	198.7	197.3	200.0	198.7	198.7	198.7	195.8	194.4	188.9	177.8	158.3
60°	176.4	173.6	175.0	175.0	175.0	176.4	173.6	172.2	168.1	159.7	141.6
62.5°	154.2	152.8	154.2	152.8	152.8	154.2	152.8	151.4	148.6	141.6	126.4
65°	133.4	130.6	133.4	132.0	132.0	132.0	130.6	130.6	127.7	123.6	109.7
67.5°	111.1	109.7	111.1	109.7	108.3	108.3	106.9	106.9	105.5	102.8	90.3
70°	88.9	86.1	87.5	84.7	86.1	83.4	83.4	82.0	80.6	79.2	69.4
72.5°	65.3	63.9	63.9	61.2	61.2	59.7	58.3	58.3	56.9	56.9	50.0
75°	44.5	44.5	43.1	40.2	41.6	38.9	38.9	38.9	37.5	36.1	32.0
77.5°	29.2	27.8	27.8	26.4	26.4	23.6	25.0	23.6	23.6	22.2	19.4
80°	16.7	16.7	16.7	15.3	15.3	13.9	13.9	13.9	12.5	12.5	11.1
82.5°	9.8	9.8	9.8	8.3	8.3	8.3	8.3	6.9	6.9	6.9	5.5
85°	5.5	4.1	4.1	4.1	4.1	4.1	4.1	2.8	2.8	2.8	2.8
87.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5
2.5°	918.1	916.8	915.3	920.9	922.3	918.1	918.1	922.3	925.1	918.1	916.8
5°	916.8	918.1	918.1	925.1	929.2	926.4	926.4	930.6	933.4	925.1	922.3
7.5°	909.8	913.9	916.8	926.4	933.4	932.0	933.4	937.6	939.0	930.6	926.4
10°	894.5	900.1	905.6	918.1	926.4	927.8	929.2	933.4	936.2	925.1	919.5
12.5°	873.7	882.0	890.3	904.2	913.9	915.3	919.5	922.3	923.7	913.9	907.0
15°	850.1	861.1	869.5	884.8	895.9	898.7	902.9	907.0	907.0	895.9	888.9
17.5°	820.9	830.6	841.7	857.0	869.5	872.3	877.8	882.0	882.0	870.9	861.1
20°	784.8	795.9	805.6	822.3	836.2	840.3	845.8	850.1	850.1	840.3	827.8
22.5°	747.3	758.4	768.1	783.4	797.3	801.5	805.6	811.1	809.7	801.5	790.3
25°	702.8	712.6	719.5	734.8	745.9	750.1	755.6	759.7	758.4	750.1	740.3
27.5°	648.7	655.6	656.9	666.7	676.5	680.6	684.8	688.9	687.5	680.6	672.2
30°	586.1	584.7	577.8	577.8	582.0	584.7	587.5	590.3	588.9	584.7	579.2
32.5°	507.0	497.2	479.2	469.4	465.3	465.3	465.3	468.1	466.7	465.3	465.3
35°	422.3	401.4	373.6	352.8	341.7	337.5	334.8	337.5	336.2	337.5	343.1
37.5°	352.8	322.3	284.8	257.0	238.9	230.5	225.0	226.4	226.4	230.5	240.3
40°	301.4	262.5	220.9	186.1	165.3	154.2	147.3	147.3	148.6	154.2	166.7
42.5°	262.5	219.5	173.6	140.3	115.3	104.2	97.3	95.9	97.3	104.2	116.7
45°	232.0	186.1	140.3	104.2	83.4	70.8	65.3	63.9	65.3	72.2	83.4
47.5°	205.6	159.7	116.7	80.6	59.7	50.0	44.5	43.1	45.9	51.4	61.2
50°	183.4	138.9	95.9	63.9	45.9	36.1	32.0	30.6	32.0	37.5	45.9
52.5°	162.5	120.8	80.6	50.0	34.7	27.8	23.6	22.2	23.6	27.8	36.1
55°	145.9	106.9	69.4	41.6	27.8	22.2	19.4	18.1	19.4	22.2	29.2
57.5°	130.6	94.5	59.7	34.7	23.6	18.1	15.3	15.3	15.3	18.1	23.6
60°	116.7	83.4	51.4	29.2	19.4	15.3	12.5	12.5	12.5	15.3	19.4
62.5°	104.2	73.6	44.5	25.0	16.7	12.5	11.1	11.1	11.1	12.5	16.7
65°	88.9	62.5	37.5	20.8	13.9	11.1	9.8	8.3	9.8	11.1	13.9
67.5°	73.6	51.4	30.6	16.7	11.1	8.3	6.9	6.9	6.9	8.3	11.1
70°	56.9	40.2	23.6	12.5	8.3	6.9	5.5	5.5	5.5	6.9	8.3
72.5°	38.9	27.8	16.7	9.8	6.9	5.5	4.1	4.1	4.1	5.5	6.9
75°	25.0	18.1	11.1	6.9	4.1	4.1	2.8	2.8	2.8	4.1	4.1
77.5°	15.3	11.1	6.9	4.1	2.8	2.8	2.8	2.8	2.8	2.8	2.8
80°	8.3	6.9	4.1	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4
82.5°	4.1	4.1	2.8	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
85°	1.4	1.4	1.4	1.4	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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5
2.5°	916.8	919.5	920.9	915.3	916.8	918.1	909.8	911.1	907.0	915.3	911.1
5°	920.9	922.3	923.7	915.3	913.9	912.5	902.9	901.5	895.9	902.9	898.7
7.5°	922.3	919.5	919.5	907.0	902.9	898.7	886.2	882.0	875.0	877.8	872.3
10°	915.3	909.8	905.6	890.3	883.4	876.4	861.1	855.6	845.8	847.3	840.3
12.5°	900.1	893.1	886.2	869.5	861.1	851.5	836.2	827.8	818.1	818.1	809.7
15°	880.6	872.3	863.9	847.3	836.2	826.4	808.4	800.1	790.3	788.9	782.0
17.5°	852.8	843.1	834.8	815.4	804.2	793.1	776.4	766.7	757.0	757.0	748.7
20°	819.5	808.4	798.7	780.6	769.5	759.7	740.3	732.0	723.6	722.2	715.3
22.5°	780.6	769.5	761.1	744.5	732.0	722.2	705.6	698.7	690.3	688.9	680.6
25°	732.0	722.2	714.0	700.1	688.9	680.6	665.3	656.9	651.4	651.4	644.5
27.5°	666.7	658.3	656.9	645.9	637.5	632.0	619.5	613.9	606.9	606.9	598.6
30°	579.2	580.6	586.1	583.4	580.6	577.8	566.7	565.3	557.0	555.5	545.9
32.5°	472.3	482.0	497.2	505.6	509.8	512.5	509.8	507.0	500.0	498.6	487.5
35°	358.4	377.8	402.8	419.5	433.3	443.1	447.2	447.2	444.5	443.1	433.3
37.5°	259.7	288.9	322.3	350.0	372.3	390.3	398.6	404.2	404.2	404.2	400.0
40°	190.3	225.0	263.9	300.1	327.8	351.5	363.9	373.6	376.4	380.6	377.8
42.5°	141.6	179.1	220.9	262.5	294.4	320.9	337.5	348.6	355.6	359.7	359.7
45°	108.3	145.9	188.9	233.4	266.7	295.8	312.5	325.0	331.9	337.5	337.5
47.5°	83.4	119.5	162.5	206.9	241.7	270.9	287.5	298.6	305.6	311.1	311.1
50°	65.3	98.6	140.3	183.4	218.1	245.8	261.1	272.2	277.8	281.9	283.4
52.5°	52.8	83.4	123.6	165.3	197.3	222.2	234.8	244.4	250.1	252.8	254.2
55°	43.1	72.2	109.7	147.3	177.8	201.4	212.5	219.5	223.6	226.4	226.4
57.5°	36.1	62.5	97.3	133.4	162.5	180.6	190.3	195.8	198.7	201.4	201.4
60°	30.6	54.2	86.1	119.5	145.9	162.5	169.5	173.6	176.4	177.8	177.8
62.5°	26.4	45.9	75.0	105.5	129.2	144.4	150.0	152.8	154.2	154.2	155.6
65°	22.2	38.9	63.9	91.6	111.1	125.0	129.2	130.6	130.6	132.0	133.4
67.5°	16.7	30.6	51.4	75.0	91.6	102.8	106.9	106.9	106.9	106.9	108.3
70°	13.9	23.6	38.9	56.9	70.8	79.2	82.0	82.0	82.0	82.0	83.4
72.5°	9.8	16.7	27.8	40.2	51.4	56.9	56.9	58.3	56.9	56.9	59.7
75°	6.9	11.1	18.1	26.4	32.0	36.1	37.5	37.5	37.5	37.5	38.9
77.5°	4.1	6.9	11.1	15.3	20.8	22.2	23.6	23.6	23.6	23.6	25.0
80°	2.8	4.1	6.9	9.8	11.1	12.5	13.9	13.9	13.9	13.9	13.9
82.5°	1.4	2.8	4.1	4.1	5.5	6.9	6.9	6.9	6.9	6.9	8.3
85°	0.0	1.4	1.4	2.8	2.8	2.8	2.8	2.8	2.8	2.8	4.1
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):**

	165°	170°	175°	180°
0°	919.5	919.5	919.5	919.5
2.5°	902.9	912.5	905.6	912.5
5°	888.9	897.2	888.9	894.5
7.5°	861.1	868.1	859.8	868.1
10°	827.8	834.8	826.4	833.4
12.5°	797.3	802.8	794.5	802.8
15°	769.5	775.0	766.7	773.6
17.5°	737.5	741.7	734.8	741.7
20°	704.2	708.3	702.8	709.7
22.5°	670.9	676.5	669.5	676.5
25°	633.4	637.5	630.6	638.9
27.5°	588.9	591.7	584.7	588.9
30°	534.7	536.1	530.6	538.9
32.5°	477.8	477.8	469.4	477.8
35°	425.0	423.7	418.0	423.7
37.5°	391.7	391.7	387.6	390.3
40°	372.3	373.6	368.1	373.6
42.5°	355.6	358.4	354.2	358.4
45°	334.8	337.5	333.3	338.9
47.5°	308.4	311.1	308.4	312.5
50°	279.2	281.9	279.2	283.4
52.5°	250.1	252.8	250.1	252.8
55°	223.6	225.0	222.2	225.0
57.5°	198.7	200.0	197.3	200.0
60°	175.0	177.8	175.0	177.8
62.5°	154.2	155.6	155.6	156.9
65°	132.0	137.5	136.1	137.5
67.5°	109.7	113.9	113.9	115.3
70°	84.7	87.5	90.3	91.6
72.5°	59.7	63.9	65.3	66.7
75°	38.9	43.1	43.1	44.5
77.5°	25.0	27.8	27.8	27.8
80°	15.3	16.7	15.3	16.7
82.5°	8.3	8.3	8.3	9.8
85°	4.1	4.1	4.1	4.1
87.5°	1.4	1.4	1.4	1.4
90°	0.0	0.0	0.0	0.0



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















(END OF REPORT)