

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: P136516

Luminaire Tested: **LD6A15D010TE ERW6A15927 6LW121LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136516
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23360)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6A15D010TE ERW6A15927 6LW121LI
Description: PORTFOLIO 6 INCH 60 DEGREE CUTOFF RECESSED DOUBLE WALL WASH LUMINAIRE
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: 1491.1 lumens
Efficiency: N/A
Efficacy: 66.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.24 / 1.14
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

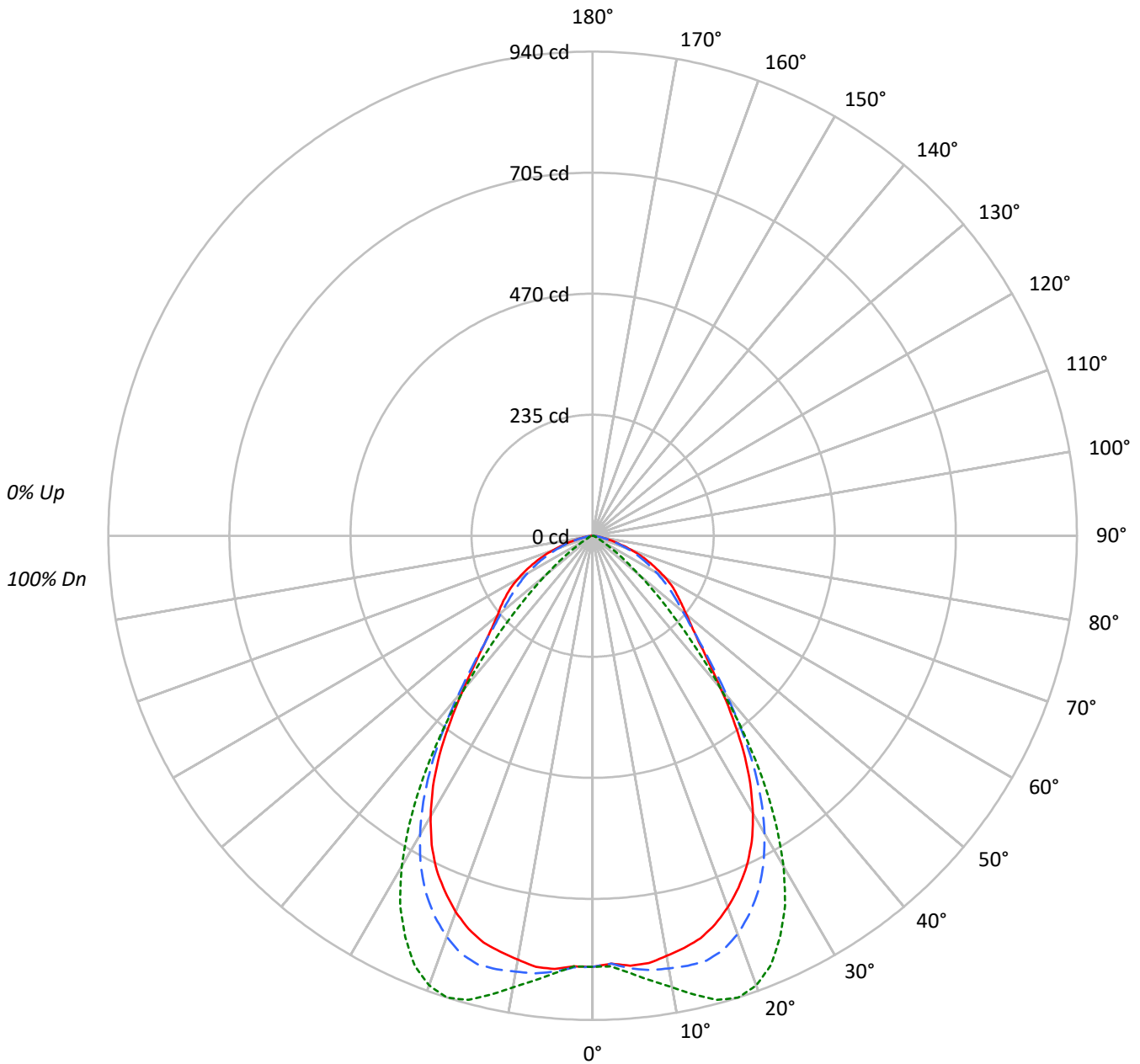
Input Watts (W): 22.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79																			
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70																			
4	90	80	73	67	88	79	72	67	77	71	66	74	69	65	72	68	65	63																			
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56																			
6	78	67	60	54	77	66	59	54	65	58	54	63	57	53	62	57	53	51																			
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46																			
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42																			
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	40	39																			
10	61	49	42	38	60	49	42	38	48	42	38	47	42	37	46	41	37	36																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	54587	54587	54587
5°	54867	55850	55287
10°	54866	58967	55363
15°	54642	63003	55222
20°	53279	64470	53945
25°	50937	61922	51556
30°	46872	55799	47355
35°	40626	45732	41224
40°	32908	32908	33359
45°	26886	20879	27375
50°	24055	11916	24481
55°	22703	6063	23431
60°	21308	2649	21856
65°	18617	1482	19281
70°	15069	1221	15680
75°	10486	807	10763
80°	6387	413	6387
85°	3144	823	3144



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.4	5.5
10°-20°	243.9	16.4
20°-30°	354.8	23.8
30°-40°	337.2	22.6
40°-50°	218.5	14.7
50°-60°	137.1	9.2
60°-70°	82.0	5.5
70°-80°	31.9	2.1
80°-90°	4.4	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°	680.1	45.6
0°-40°	1017.3	68.2
0°-60°	1372.8	92.1
0°-90°	1491.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1491.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	837	837	837	837	837	
5°	838	843	853	850	844	80
15°	809	854	933	861	818	227
25°	708	761	860	765	716	323
35°	510	544	574	546	518	316
45°	291	296	226	297	297	230
55°	200	184	53	186	206	179
65°	121	106	10	108	125	119
75°	42	36	3	37	43	46
85°	4	4	1	4	4	6
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°	836.7	836.7	836.7	836.7	836.7	836.7	836.7	836.7	836.7	836.7	836.7
2.5°	831.4	826.0	841.1	832.5	833.5	844.2	835.7	832.5	843.2	831.4	836.7
5°	837.8	833.5	848.5	841.1	842.1	852.8	845.3	842.1	853.9	843.2	848.5
7.5°	836.7	833.5	847.4	841.1	842.1	854.9	847.4	846.3	860.2	850.6	858.1
10°	828.2	823.9	838.8	833.5	835.7	849.5	843.2	843.2	859.2	852.8	863.4
12.5°	819.7	815.4	830.4	826.0	828.2	843.2	838.8	841.1	859.2	854.9	868.8
15°	809.0	804.8	820.7	816.5	818.6	834.6	832.5	834.6	854.9	853.9	869.8
17.5°	790.9	788.7	802.6	800.4	802.6	818.6	817.6	820.7	843.2	843.2	863.4
20°	767.4	764.2	779.1	777.0	778.1	794.1	794.1	797.2	820.7	822.9	843.2
22.5°	739.7	737.4	752.5	749.2	751.4	766.3	766.3	769.5	791.9	795.1	816.5
25°	707.6	705.5	719.3	718.3	719.3	734.3	733.2	737.4	758.8	760.9	781.3
27.5°	669.2	666.0	679.9	679.9	680.9	694.8	694.8	696.9	716.2	718.3	737.4
30°	622.2	619.0	631.8	632.9	632.9	646.7	646.7	647.8	666.0	667.1	684.1
32.5°	568.9	568.9	578.5	579.5	579.5	592.3	593.4	593.4	609.4	609.4	623.3
35°	510.1	511.2	518.7	519.7	520.8	532.6	532.6	531.5	545.4	544.3	556.0
37.5°	447.1	447.1	454.7	455.7	455.7	466.4	466.4	465.3	477.1	473.9	482.4
40°	386.4	386.4	392.7	394.9	393.8	402.4	402.4	401.3	409.8	405.6	409.8
42.5°	333.0	335.2	339.4	340.5	339.4	346.8	345.8	344.7	351.2	344.7	345.8
45°	291.4	293.5	296.7	297.8	296.7	302.0	301.0	298.9	302.0	295.6	292.4
47.5°	260.5	261.5	266.8	265.7	264.7	268.9	268.9	264.7	265.7	257.2	250.8
50°	237.0	238.0	242.3	242.3	240.1	244.4	242.3	238.0	237.0	227.3	217.7
52.5°	217.7	218.8	223.1	223.1	220.9	224.2	222.0	215.6	214.5	204.9	193.1
55°	199.6	200.7	204.9	204.9	202.8	204.9	201.7	196.4	194.2	183.6	170.8
57.5°	183.6	182.5	185.7	185.7	183.6	184.7	182.5	177.2	172.9	163.3	150.5
60°	163.3	162.2	164.4	164.4	162.2	163.3	161.2	154.7	152.6	143.0	130.2
62.5°	140.9	140.9	143.0	143.0	140.9	140.9	139.8	133.5	131.2	122.8	112.1
65°	120.6	120.6	122.8	122.8	120.6	121.7	119.5	115.3	113.1	105.6	96.1
67.5°	100.3	100.3	101.4	101.4	100.3	100.3	99.3	96.1	92.8	87.5	79.0
70°	79.0	79.0	80.0	80.0	79.0	79.0	79.0	75.8	74.7	69.4	63.0
72.5°	58.7	58.7	59.8	59.8	59.8	60.9	59.8	57.7	55.5	52.3	47.0
75°	41.6	41.6	41.6	42.7	41.6	41.6	42.7	40.5	39.5	36.3	33.1
77.5°	27.7	27.7	27.7	27.7	27.7	28.8	27.7	27.7	26.7	24.6	22.4
80°	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	16.0	16.0	13.9
82.5°	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	8.6	7.5
85°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	3.2
87.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	836.7	836.7	836.7	836.7	836.7	836.7	836.7	836.7	836.7	836.7	836.7
2.5°	835.7	836.7	836.7	840.0	843.2	834.6	838.8	836.7	834.6	843.2	837.8
5°	849.5	850.6	850.6	854.9	859.2	849.5	853.9	852.8	850.6	858.1	852.8
7.5°	860.2	863.4	865.6	870.9	876.2	867.7	873.0	870.9	869.8	877.3	869.8
10°	867.7	874.1	877.3	885.8	893.3	884.8	892.3	890.1	889.0	895.5	886.9
12.5°	876.2	884.8	893.3	902.9	913.6	906.1	915.8	912.5	912.5	917.9	907.2
15°	881.6	892.3	904.0	917.9	930.7	925.3	936.0	932.8	932.8	937.0	925.3
17.5°	876.2	890.1	904.0	920.0	934.9	931.8	943.5	940.2	939.2	943.5	929.6
20°	858.1	874.1	890.1	906.1	923.2	921.1	933.9	928.6	929.6	931.8	917.9
22.5°	829.3	846.3	862.3	879.5	895.5	894.4	906.1	902.9	901.8	905.1	890.1
25°	795.1	810.0	825.0	840.0	856.0	853.9	865.6	860.2	861.3	862.3	849.5
27.5°	749.2	763.1	774.8	787.6	802.6	799.4	811.1	809.0	805.8	806.9	796.2
30°	692.7	704.4	712.9	723.6	735.3	732.2	742.8	740.7	738.5	738.5	732.2
32.5°	628.6	637.1	642.5	649.9	658.5	655.3	663.9	661.7	659.6	659.6	655.3
35°	557.1	562.5	562.5	566.7	573.1	567.8	575.3	574.2	571.0	572.0	571.0
37.5°	479.2	481.3	477.1	477.1	481.3	473.9	480.3	480.3	477.1	478.2	478.2
40°	403.4	402.4	393.8	389.6	389.6	382.1	387.5	386.4	384.2	385.3	387.5
42.5°	336.2	329.8	318.0	309.5	307.3	298.9	302.0	301.0	298.9	301.0	304.2
45°	279.6	267.9	251.9	240.1	234.8	226.3	227.3	226.3	225.2	227.3	232.6
47.5°	234.8	218.8	198.5	183.6	176.1	166.5	166.5	165.4	165.4	170.8	174.0
50°	199.6	180.3	156.8	139.8	129.1	120.6	118.4	117.4	118.4	122.8	129.1
52.5°	172.9	149.4	123.8	105.6	93.9	84.3	82.2	81.1	82.2	86.5	92.8
55°	149.4	124.9	98.2	77.9	65.1	56.5	53.3	53.3	53.3	58.7	65.1
57.5°	128.1	103.5	76.8	56.5	44.9	36.3	33.1	32.1	34.2	37.4	43.7
60°	110.0	86.5	60.9	42.7	30.9	23.5	20.3	20.3	20.3	24.6	30.9
62.5°	93.9	72.6	49.1	32.1	22.4	16.0	12.8	12.8	13.9	16.0	22.4
65°	80.0	61.9	41.6	27.7	18.1	12.8	10.7	9.6	10.7	12.8	18.1
67.5°	66.1	51.2	35.2	23.5	16.0	10.7	9.6	8.6	8.6	11.7	14.9
70°	52.3	40.5	28.8	19.2	12.8	8.6	7.5	6.4	7.5	9.6	12.8
72.5°	39.5	30.9	21.4	14.9	9.6	7.5	5.3	5.3	5.3	7.5	9.6
75°	27.7	22.4	16.0	10.7	6.4	4.2	4.2	3.2	4.2	5.3	6.4
77.5°	18.1	14.9	10.7	6.4	4.2	3.2	2.1	2.1	2.1	3.2	4.2
80°	11.7	9.6	6.4	4.2	3.2	2.1	1.1	1.1	1.1	2.1	2.1
82.5°	6.4	5.3	3.2	2.1	2.1	1.1	1.1	1.1	1.1	1.1	1.1
85°	3.2	2.1	2.1	1.1	1.1	1.1	0.0	1.1	1.1	1.1	1.1
87.5°	1.1	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°	836.7	836.7	836.7	836.7	836.7	836.7	836.7	836.7	836.7	836.7	836.7
2.5°	838.8	835.7	840.0	843.2	842.1	838.8	844.2	835.7	838.8	835.7	830.4
5°	853.9	850.6	853.9	856.0	854.9	849.5	853.9	846.3	848.5	844.2	838.8
7.5°	869.8	865.6	866.7	867.7	864.5	857.0	860.2	850.6	851.6	846.3	840.0
10°	884.8	878.4	877.3	875.1	868.8	859.2	860.2	848.5	847.4	840.0	832.5
12.5°	904.0	893.3	889.0	884.8	875.1	862.3	860.2	846.3	844.2	835.7	827.2
15°	917.9	906.1	898.6	890.1	877.3	861.3	857.0	841.1	836.7	827.2	818.6
17.5°	921.1	906.1	895.5	884.8	869.8	850.6	844.2	827.2	821.8	811.1	802.6
20°	907.2	891.2	879.5	865.6	850.6	828.2	821.8	803.7	797.2	787.6	779.1
22.5°	880.5	862.3	850.6	836.7	821.8	800.4	793.0	775.9	769.5	759.9	751.4
25°	842.1	825.0	813.2	800.4	786.6	765.3	758.8	742.8	737.4	727.9	719.3
27.5°	788.7	772.7	766.3	753.5	740.7	722.5	716.2	702.3	696.9	690.6	680.9
30°	724.6	710.8	707.6	695.9	686.2	670.2	664.9	653.2	647.8	642.5	633.9
32.5°	651.1	640.4	640.4	630.8	624.3	611.5	607.3	597.6	593.4	589.2	581.7
35°	567.8	560.3	564.6	558.2	555.0	546.4	543.2	535.7	532.6	529.4	521.9
37.5°	479.2	473.9	482.4	483.4	483.4	476.0	473.9	469.6	467.5	464.3	457.8
40°	391.7	390.6	403.4	405.6	412.0	407.7	408.7	405.6	403.4	401.3	397.0
42.5°	310.6	314.9	330.8	340.5	346.8	346.8	350.1	349.0	348.0	345.8	342.6
45°	241.2	249.8	268.9	280.7	293.5	296.7	302.0	302.0	303.1	302.0	298.9
47.5°	184.7	197.5	219.8	238.0	251.9	258.2	265.7	267.9	268.9	268.9	266.8
50°	139.8	155.8	181.4	201.7	220.9	229.4	238.0	241.2	245.4	244.4	242.3
52.5°	105.6	123.8	151.6	176.1	196.4	206.0	215.6	219.8	224.2	224.2	223.1
55°	77.9	97.2	127.0	152.6	174.0	185.7	195.3	199.6	204.9	206.0	204.9
57.5°	56.5	75.8	104.6	132.3	152.6	165.4	175.0	179.3	184.7	185.7	185.7
60°	41.6	60.9	88.6	114.2	133.5	146.3	153.7	159.1	163.3	165.4	165.4
62.5°	32.1	49.1	74.7	98.2	115.3	125.9	133.5	137.7	141.9	143.0	144.0
65°	26.7	41.6	63.0	83.3	98.2	107.8	114.2	118.4	121.7	122.8	122.8
67.5°	22.4	35.2	52.3	68.3	81.1	88.6	93.9	97.2	100.3	101.4	101.4
70°	18.1	27.7	41.6	54.4	64.0	70.5	74.7	77.9	80.0	80.0	80.0
72.5°	13.9	21.4	30.9	40.5	48.0	53.3	56.5	57.7	59.8	59.8	59.8
75°	9.6	14.9	22.4	28.8	33.1	37.4	39.5	40.5	41.6	42.7	41.6
77.5°	6.4	9.6	13.9	18.1	22.4	24.6	25.6	26.7	27.7	27.7	27.7
80°	4.2	6.4	8.6	11.7	13.9	14.9	16.0	16.0	17.0	17.0	17.0
82.5°	2.1	3.2	5.3	6.4	7.5	8.6	8.6	8.6	9.6	9.6	8.6
85°	1.1	1.1	2.1	3.2	3.2	4.2	4.2	4.2	4.2	4.2	4.2
87.5°	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
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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CATALOG NUMBER: LD6A15D010TE ERW6A15927 6LW121LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	836.7	836.7	836.7	836.7
2.5°	832.5	834.6	826.0	836.7
5°	840.0	842.1	833.5	844.2
7.5°	841.1	842.1	833.5	844.2
10°	833.5	833.5	825.0	835.7
12.5°	827.2	826.0	816.5	827.2
15°	817.6	816.5	806.9	817.6
17.5°	801.5	800.4	790.9	800.4
20°	777.0	775.9	767.4	777.0
22.5°	750.3	748.1	739.7	748.1
25°	719.3	717.2	708.7	716.2
27.5°	679.9	677.8	669.2	676.7
30°	632.9	629.7	623.3	628.6
32.5°	579.5	577.4	569.9	576.4
35°	520.8	517.6	512.3	517.6
37.5°	456.8	454.7	449.4	452.5
40°	394.9	393.8	389.6	391.7
42.5°	341.5	339.4	336.2	338.3
45°	298.9	297.8	294.5	296.7
47.5°	266.8	265.7	262.6	264.7
50°	243.3	242.3	240.1	241.2
52.5°	224.2	223.1	220.9	224.2
55°	207.0	206.0	202.8	206.0
57.5°	187.9	186.8	183.6	187.9
60°	166.5	166.5	163.3	167.5
62.5°	145.1	145.1	143.0	146.3
65°	124.9	123.8	122.8	124.9
67.5°	102.4	101.4	101.4	103.5
70°	81.1	80.0	80.0	82.2
72.5°	60.9	59.8	59.8	60.9
75°	42.7	41.6	41.6	42.7
77.5°	27.7	27.7	27.7	27.7
80°	17.0	17.0	17.0	17.0
82.5°	9.6	9.6	8.6	9.6
85°	4.2	4.2	4.2	4.2
87.5°	1.1	1.1	1.1	1.1
90°	0.0	0.0	0.0	0.0



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













(END OF REPORT)