

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: P274460

Luminaire Tested: **LD6B20DE010W2N2765 EU6B1020W2N902765 6LBDW0H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P274460
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-9)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B20DE010W2N2765 EU6B1020W2N902765 6LBDW0H
Description: PORTFOLIO 6" W2N RN DOWNLIGHT, DOUBLE WALLWASH WITH HAZE FINISH
Light Source: W2N 2700K-6500K CCT TUNING RANGE
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1566.1 lumens
Efficiency: N/A
Efficacy: 55.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

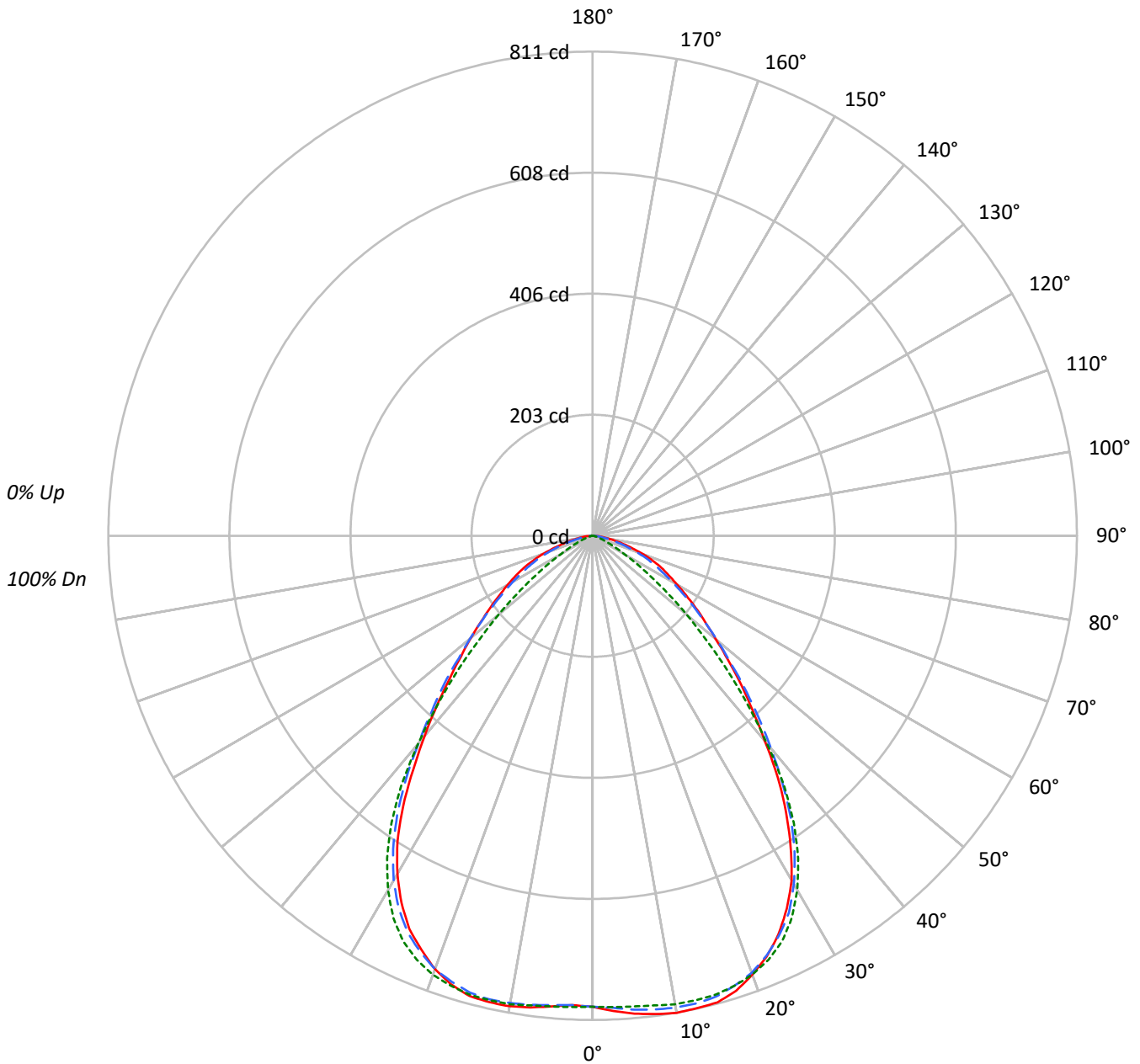
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	104	101	109	105	102	99	101	98	96	97	95	93	94	92	91	89																			
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78																			
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68																			
4	89	78	71	65	87	77	70	65	75	69	64	73	67	63	71	66	62	61																			
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54																			
6	77	65	57	52	75	64	57	51	63	56	51	61	55	51	59	54	50	48																			
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	45	44																			
8	67	55	47	42	66	54	47	42	53	47	42	52	46	42	51	45	41	40																			
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36																			
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	51475	51475	51475
5°	52621	51822	51822
10°	53753	52786	53011
15°	54648	53743	53899
20°	54313	54313	53619
25°	53024	53989	52297
30°	50195	51618	49268
35°	44975	46751	44091
40°	38205	38682	37260
45°	32329	29552	31204
50°	27303	20847	26957
55°	23989	13456	23738
60°	21255	8012	21412
65°	19636	4816	19636
70°	17034	2766	16614
75°	13511	1689	12654
80°	10069	1240	9656
85°	9207	823	8384



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.0	4.9
10°-20°	224.8	14.4
20°-30°	338.1	21.6
30°-40°	355.5	22.7
40°-50°	265.6	17.0
50°-60°	165.3	10.6
60°-70°	94.0	6.0
70°-80°	38.7	2.5
80°-90°	8.0	0.5
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°	638.9	40.8
0°-40°	994.4	63.5
0°-60°	1425.3	91.0
0°-90°	1566.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1566.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	789	789	789	789	789	
5°	804	797	791	789	791	77
15°	809	799	796	792	798	227
25°	737	739	750	733	726	337
35°	565	579	587	570	554	350
45°	350	358	320	352	338	272
55°	211	206	118	203	209	190
65°	127	114	31	114	127	125
75°	54	42	7	41	50	58
85°	12	8	1	7	11	14
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°	789.0	789.0	789.0	789.0	789.0	789.0	789.0	789.0	789.0	789.0	789.0
2.5°	796.8	795.7	796.8	794.6	793.5	793.5	794.6	792.4	791.3	792.4	791.3
5°	803.5	801.3	802.4	801.3	799.1	799.1	800.2	796.8	796.8	798.0	796.8
7.5°	808.0	808.0	808.0	805.8	804.7	803.5	805.8	802.4	801.3	801.3	800.2
10°	811.4	810.2	811.4	809.1	806.9	805.8	808.0	805.8	803.5	805.8	802.4
12.5°	810.2	810.2	810.2	809.1	806.9	805.8	808.0	804.7	803.5	804.7	802.4
15°	809.1	805.8	806.9	805.8	802.4	802.4	803.5	800.2	798.0	801.3	799.1
17.5°	799.1	796.8	798.0	795.7	793.5	792.4	793.5	792.4	790.2	792.4	790.2
20°	782.3	782.3	783.5	781.2	779.0	777.9	780.1	777.9	775.6	779.0	779.0
22.5°	762.3	762.3	762.3	761.1	760.0	760.0	760.0	758.9	757.8	760.0	761.1
25°	736.6	735.5	736.6	737.7	736.6	735.5	736.6	736.6	734.4	738.8	738.8
27.5°	704.2	704.2	706.5	705.3	705.3	704.2	706.5	706.5	705.3	708.7	712.0
30°	666.3	664.0	666.3	666.3	667.4	667.4	668.5	668.5	668.5	671.9	674.1
32.5°	617.2	618.3	621.6	620.5	619.4	622.7	622.7	625.0	626.1	628.3	629.4
35°	564.7	565.8	565.8	566.9	569.2	566.9	572.5	571.4	572.5	577.0	579.2
37.5°	508.9	505.6	511.1	508.9	510.0	510.0	512.3	513.4	516.7	522.3	522.3
40°	448.6	449.8	452.0	453.1	454.2	454.2	454.2	457.6	458.7	465.4	464.3
42.5°	396.2	396.2	398.4	399.5	399.5	399.5	399.5	402.9	405.1	407.4	409.6
45°	350.4	347.1	349.3	349.3	351.6	350.4	352.7	354.9	356.0	359.4	358.2
47.5°	306.9	305.8	306.9	308.0	306.9	308.0	309.1	310.3	311.4	311.4	311.4
50°	269.0	269.0	270.1	271.2	271.2	271.2	271.2	272.3	272.3	274.5	272.3
52.5°	237.7	238.8	238.8	237.7	238.8	238.8	239.9	239.9	238.8	238.8	235.5
55°	210.9	209.8	210.9	209.8	210.9	210.9	209.8	209.8	208.7	207.6	206.5
57.5°	185.3	185.3	185.3	185.3	184.1	185.3	184.1	183.0	183.0	180.8	177.4
60°	162.9	162.9	162.9	162.9	162.9	161.8	162.9	161.8	159.6	157.4	152.9
62.5°	144.0	142.9	144.0	142.9	142.9	141.7	141.7	140.6	138.4	136.2	131.7
65°	127.2	128.3	127.2	127.2	126.1	125.0	125.0	123.9	120.5	118.3	113.8
67.5°	109.4	108.3	108.3	108.3	107.1	107.1	107.1	104.9	102.7	99.3	94.9
70°	89.3	89.3	89.3	88.2	88.2	87.1	87.1	85.9	83.7	81.5	75.9
72.5°	70.3	70.3	70.3	68.1	69.2	68.1	68.1	65.8	64.7	61.4	58.0
75°	53.6	53.6	52.5	52.5	51.3	50.2	50.2	49.1	48.0	45.8	42.4
77.5°	39.1	39.1	39.1	37.9	36.8	35.7	35.7	34.6	33.5	32.4	30.1
80°	26.8	26.8	26.8	26.8	25.7	24.6	24.6	23.4	23.4	22.3	20.1
82.5°	17.9	17.9	17.9	17.9	16.7	16.7	16.7	15.6	14.5	14.5	12.3
85°	12.3	12.3	11.2	11.2	11.2	11.2	10.0	10.0	8.9	7.8	7.8
87.5°	6.7	6.7	6.7	6.7	5.6	5.6	5.6	5.6	4.5	4.5	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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	789.0	789.0	789.0	789.0	789.0	789.0	789.0	789.0	789.0	789.0	789.0
2.5°	794.6	794.6	793.5	790.2	791.3	790.2	791.3	790.2	786.8	790.2	786.8
5°	799.1	800.2	798.0	793.5	794.6	793.5	793.5	792.4	789.0	791.3	789.0
7.5°	803.5	802.4	801.3	796.8	798.0	796.8	796.8	794.6	791.3	793.5	790.2
10°	805.8	805.8	803.5	799.1	799.1	798.0	799.1	798.0	793.5	796.8	794.6
12.5°	805.8	804.7	804.7	799.1	800.2	799.1	800.2	798.0	794.6	796.8	795.7
15°	802.4	802.4	801.3	795.7	796.8	796.8	798.0	795.7	792.4	795.7	793.5
17.5°	795.7	795.7	794.6	790.2	792.4	792.4	793.5	791.3	787.9	790.2	790.2
20°	782.3	783.5	783.5	780.1	782.3	782.3	783.5	782.3	781.2	782.3	780.1
22.5°	766.7	768.9	768.9	765.6	767.8	767.8	771.2	770.1	767.8	768.9	767.8
25°	743.3	745.5	747.7	745.5	747.7	747.7	751.1	750.0	747.7	750.0	746.6
27.5°	716.5	717.6	719.8	717.6	721.0	719.8	723.2	722.1	718.7	722.1	721.0
30°	678.5	683.0	686.4	683.0	686.4	686.4	688.6	687.5	686.4	685.2	685.2
32.5°	636.1	640.6	640.6	639.5	641.7	641.7	642.8	640.6	639.5	640.6	641.7
35°	583.7	585.9	588.2	587.0	588.2	589.3	588.2	589.3	585.9	587.0	587.0
37.5°	526.8	529.0	529.0	525.7	527.9	527.9	525.7	525.7	523.4	525.7	521.2
40°	466.5	464.3	465.4	463.2	460.9	460.9	459.8	455.3	453.1	454.2	455.3
42.5°	407.4	407.4	404.0	398.4	392.8	392.8	389.5	387.3	382.8	385.0	383.9
45°	357.1	351.6	347.1	338.2	334.8	332.6	327.0	321.4	319.2	320.3	319.2
47.5°	309.1	304.7	293.5	281.2	277.9	274.5	267.8	261.2	258.9	256.7	256.7
50°	269.0	261.2	248.9	235.5	229.9	224.3	215.4	208.7	204.2	205.4	205.4
52.5°	232.1	223.2	208.7	192.0	185.3	178.6	170.8	162.9	159.6	158.5	158.5
55°	199.8	189.7	175.2	156.2	150.7	142.9	132.8	123.9	119.4	118.3	120.5
57.5°	170.8	161.8	145.1	126.1	119.4	111.6	101.6	93.7	88.2	87.1	88.2
60°	147.3	135.0	120.5	102.7	93.7	87.1	75.9	69.2	63.6	61.4	62.5
62.5°	123.9	112.7	98.2	80.4	73.7	67.0	56.9	49.1	44.6	43.5	44.6
65°	106.0	94.9	81.5	65.8	59.1	52.5	43.5	35.7	32.4	31.2	32.4
67.5°	88.2	78.1	67.0	52.5	46.9	41.3	32.4	26.8	22.3	21.2	22.3
70°	71.4	62.5	51.3	41.3	35.7	31.2	24.6	19.0	15.6	14.5	15.6
72.5°	53.6	46.9	39.1	30.1	26.8	23.4	17.9	13.4	11.2	10.0	11.2
75°	39.1	33.5	27.9	21.2	19.0	16.7	12.3	8.9	7.8	6.7	7.8
77.5°	26.8	23.4	19.0	14.5	12.3	11.2	7.8	6.7	5.6	4.5	4.5
80°	17.9	15.6	12.3	10.0	8.9	7.8	5.6	4.5	3.3	3.3	3.3
82.5°	11.2	8.9	7.8	5.6	4.5	4.5	3.3	2.2	2.2	2.2	2.2
85°	6.7	5.6	4.5	3.3	2.2	2.2	1.1	1.1	1.1	1.1	1.1
87.5°	3.3	2.2	2.2	1.1	1.1	1.1	1.1	1.1	0.0	0.0	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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	789.0	789.0	789.0	789.0	789.0	789.0	789.0	789.0	789.0	789.0	789.0
2.5°	789.0	786.8	786.8	787.9	789.0	790.2	787.9	786.8	786.8	790.2	787.9
5°	789.0	787.9	787.9	787.9	790.2	791.3	789.0	787.9	789.0	792.4	791.3
7.5°	792.4	790.2	791.3	791.3	792.4	794.6	792.4	791.3	792.4	795.7	793.5
10°	794.6	792.4	793.5	792.4	795.7	796.8	794.6	793.5	794.6	799.1	798.0
12.5°	795.7	794.6	794.6	793.5	796.8	798.0	795.7	794.6	795.7	799.1	798.0
15°	793.5	792.4	792.4	792.4	794.6	796.8	793.5	792.4	792.4	795.7	794.6
17.5°	789.0	786.8	786.8	786.8	787.9	789.0	785.7	784.6	783.5	786.8	785.7
20°	781.2	779.0	776.8	776.8	777.9	777.9	775.6	772.3	772.3	773.4	771.2
22.5°	766.7	765.6	763.4	762.3	764.5	763.4	758.9	755.6	754.4	755.6	753.3
25°	746.6	744.4	743.3	742.2	743.3	742.2	737.7	733.2	733.2	733.2	729.9
27.5°	718.7	716.5	715.4	715.4	716.5	714.3	709.8	705.3	703.1	703.1	699.8
30°	683.0	683.0	681.9	680.8	679.7	679.7	673.0	668.5	666.3	667.4	665.2
32.5°	639.5	638.4	637.3	633.9	635.0	633.9	628.3	625.0	621.6	619.4	618.3
35°	583.7	583.7	582.6	582.6	582.6	581.5	575.9	572.5	570.3	569.2	565.8
37.5°	522.3	521.2	520.1	520.1	520.1	520.1	516.7	513.4	513.4	512.3	510.0
40°	453.1	454.2	455.3	454.2	457.6	460.9	456.5	454.2	453.1	456.5	452.0
42.5°	386.1	385.0	390.6	391.7	391.7	397.3	398.4	399.5	398.4	400.7	400.7
45°	321.4	320.3	325.9	328.1	333.7	340.4	343.7	349.3	351.6	353.8	351.6
47.5°	260.0	264.5	269.0	274.5	279.0	290.2	296.9	302.4	304.7	308.0	308.0
50°	208.7	213.2	221.0	225.4	231.0	244.4	255.6	263.4	267.8	271.2	270.1
52.5°	160.7	168.5	178.6	183.0	190.8	206.5	218.7	227.7	233.3	236.6	237.7
55°	123.9	130.6	140.6	147.3	155.1	171.9	187.5	197.5	203.1	207.6	209.8
57.5°	91.5	99.3	110.5	116.1	125.0	144.0	157.4	169.6	176.3	181.9	183.0
60°	67.0	74.8	84.8	91.5	100.4	119.4	135.0	146.2	154.0	158.5	160.7
62.5°	48.0	55.8	65.8	72.5	80.4	97.1	112.7	123.9	131.7	137.3	140.6
65°	34.6	42.4	52.5	58.0	64.7	80.4	94.9	106.0	113.8	120.5	122.8
67.5°	25.7	31.2	40.2	45.8	52.5	64.7	77.0	87.1	94.9	100.4	102.7
70°	19.0	23.4	31.2	34.6	39.1	50.2	60.3	69.2	75.9	80.4	82.6
72.5°	13.4	16.7	22.3	25.7	29.0	37.9	45.8	52.5	56.9	61.4	63.6
75°	8.9	11.2	15.6	17.9	20.1	26.8	32.4	37.9	41.3	44.6	45.8
77.5°	5.6	7.8	11.2	12.3	14.5	17.9	22.3	25.7	27.9	30.1	32.4
80°	3.3	4.5	6.7	7.8	8.9	12.3	14.5	16.7	19.0	21.2	22.3
82.5°	2.2	3.3	4.5	4.5	5.6	6.7	8.9	11.2	12.3	13.4	14.5
85°	1.1	1.1	2.2	2.2	3.3	3.3	4.5	5.6	6.7	7.8	8.9
87.5°	1.1	1.1	1.1	1.1	2.2	2.2	3.3	3.3	3.3	4.5	4.5
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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CATALOG NUMBER: LD6B20DE010W2N2765 EU6B1020W2N902765 6LBDW0H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	789.0	789.0	789.0	789.0	789.0	789.0	789.0	789.0
2.5°	785.7	789.0	785.7	787.9	786.8	786.8	785.7	786.8
5°	789.0	793.5	789.0	792.4	790.2	790.2	790.2	791.3
7.5°	792.4	796.8	793.5	796.8	795.7	794.6	794.6	796.8
10°	795.7	799.1	796.8	800.2	799.1	798.0	798.0	800.2
12.5°	795.7	800.2	798.0	801.3	800.2	799.1	799.1	800.2
15°	792.4	798.0	794.6	798.0	796.8	795.7	795.7	798.0
17.5°	782.3	786.8	784.6	786.8	786.8	785.7	786.8	787.9
20°	768.9	772.3	770.1	772.3	772.3	770.1	771.2	772.3
22.5°	750.0	753.3	751.1	753.3	752.2	751.1	751.1	750.0
25°	726.5	731.0	727.7	729.9	727.7	725.4	725.4	726.5
27.5°	697.5	700.9	696.4	698.6	696.4	694.2	694.2	693.1
30°	659.6	660.7	657.3	659.6	657.3	656.2	654.0	654.0
32.5°	613.8	614.9	611.6	611.6	609.4	609.4	604.9	608.2
35°	560.2	561.4	560.2	559.1	555.8	554.7	553.6	553.6
37.5°	504.4	504.4	501.1	500.0	497.8	495.5	496.6	493.3
40°	447.5	446.4	443.1	444.2	443.1	439.7	438.6	437.5
42.5°	394.0	394.0	390.6	391.7	389.5	388.4	385.0	386.1
45°	347.1	347.1	343.7	343.7	342.6	339.3	340.4	338.2
47.5°	304.7	304.7	303.6	303.6	300.2	299.1	299.1	299.1
50°	267.8	267.8	267.8	267.8	266.7	265.6	264.5	265.6
52.5°	236.6	238.8	237.7	237.7	236.6	235.5	234.4	234.4
55°	208.7	209.8	209.8	210.9	209.8	208.7	209.8	208.7
57.5°	184.1	186.4	186.4	186.4	186.4	186.4	185.3	184.1
60°	162.9	164.1	164.1	165.2	165.2	165.2	164.1	164.1
62.5°	141.7	144.0	145.1	145.1	146.2	145.1	145.1	145.1
65°	125.0	127.2	128.3	127.2	128.3	128.3	127.2	127.2
67.5°	104.9	107.1	107.1	107.1	107.1	108.3	107.1	107.1
70°	84.8	87.1	85.9	87.1	87.1	87.1	87.1	87.1
72.5°	64.7	65.8	67.0	67.0	68.1	67.0	67.0	67.0
75°	46.9	49.1	49.1	49.1	49.1	50.2	50.2	50.2
77.5°	33.5	34.6	34.6	35.7	35.7	35.7	35.7	36.8
80°	23.4	23.4	24.6	24.6	25.7	25.7	25.7	25.7
82.5°	15.6	16.7	16.7	16.7	16.7	16.7	16.7	16.7
85°	8.9	10.0	10.0	10.0	10.0	11.2	11.2	11.2
87.5°	5.6	5.6	5.6	5.6	5.6	5.6	4.5	4.5
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)