

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: P252575

Luminaire Tested: **LD6B20D010 EU6B10209024 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252575
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-8)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B20D010 EU6B10209024 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1468.0 lumens
Efficiency: N/A
Efficacy: 70.6 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.22 / 1.15
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

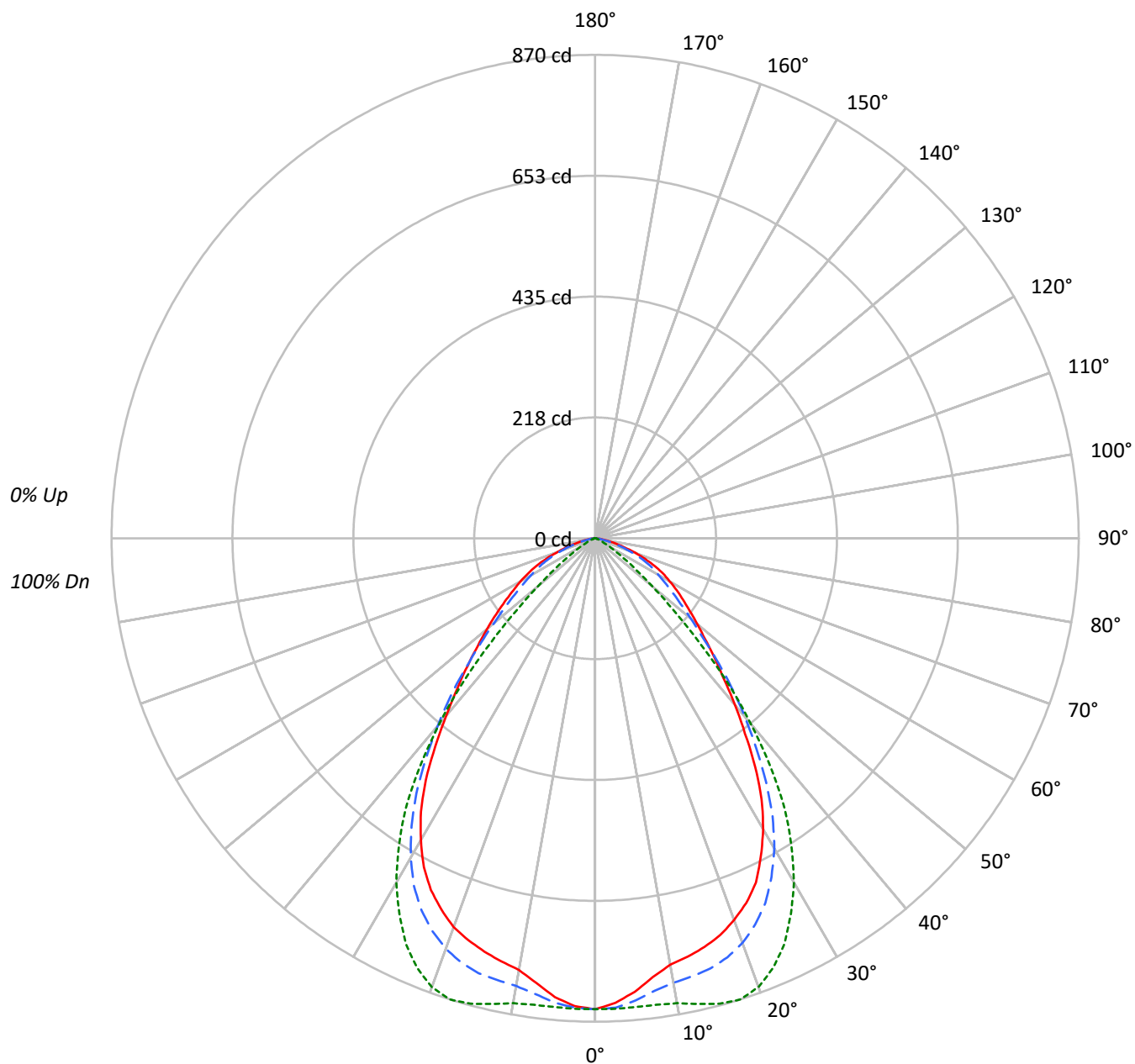
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252575

CATALOG NUMBER: LD6B20D010 EU6B10209024 6LBDW1LI

Luminous Intensity Polar Plot





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CATALOG NUMBER: LD6B20D010 EU6B10209024 6LBDW1LI

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79		
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70		
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62		
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56		
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50		
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46		
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42		
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38		
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	55291	55291	55291
5°	53643	55444	54285
10°	51606	56277	52256
15°	51420	58566	52014
20°	50752	59659	51703
25°	49231	57977	50289
30°	45547	53886	47242
35°	39957	47372	42299
40°	33300	37132	35463
45°	28021	24496	29921
50°	24268	13428	25760
55°	21953	7132	22510
60°	20198	3706	20198
65°	18309	1961	17845
70°	14764	1125	13639
75°	10133	731	9377
80°	6612	376	5899
85°	4416	749	3668



TEST NUMBER: P252575

CATALOG NUMBER: LD6B20D010 EU6B10209024 6LBDW1LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.0	5.4
10°-20°	228.5	15.6
20°-30°	337.7	23.0
30°-40°	341.1	23.2
40°-50°	235.1	16.0
50°-60°	135.0	9.2
60°-70°	78.6	5.4
70°-80°	28.7	2.0
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°	645.2	44.0
0°-40°	986.3	67.2
0°-60°	1356.4	92.4
0°-90°	1468.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1468.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	848	848	848	848	848	
5°	819	835	847	839	829	77
15°	761	802	867	810	770	214
25°	684	724	805	739	699	312
35°	502	536	595	560	531	311
45°	304	308	266	327	324	236
55°	193	170	63	176	198	174
65°	119	100	13	99	116	116
75°	40	32	3	31	37	45
85°	6	3	1	4	5	7
90°	0	0	0	0	0	



TEST NUMBER: P252575

CATALOG NUMBER: LD6B20D010 EU6B10209024 6LBDW1LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	847.5	847.5	847.5	847.5	847.5	847.5	847.5	847.5	847.5	847.5	847.5
2.5°	836.8	837.8	838.7	837.8	838.7	842.7	839.7	841.7	841.7	842.7	845.6
5°	819.1	819.1	821.1	820.1	823.1	827.0	824.0	827.0	828.0	829.9	834.8
7.5°	796.6	796.6	797.6	797.6	801.5	805.4	803.5	807.4	811.3	815.2	821.1
10°	779.0	780.9	780.9	781.9	785.8	790.7	789.7	794.6	798.6	804.4	812.3
12.5°	771.1	772.1	772.1	774.1	778.0	782.9	781.9	786.8	792.7	799.5	807.4
15°	761.3	763.3	762.3	764.3	768.2	773.1	772.1	777.0	783.9	790.7	801.5
17.5°	748.6	749.6	750.5	750.5	754.5	758.4	758.4	763.3	771.1	779.0	790.7
20°	731.0	732.9	732.9	733.9	736.8	742.7	741.7	746.6	754.5	762.3	775.0
22.5°	710.4	711.4	711.4	712.3	717.2	720.2	721.2	725.1	731.9	740.7	752.5
25°	683.9	684.9	683.9	686.9	688.8	694.7	692.7	697.6	705.5	712.3	724.1
27.5°	645.7	647.7	647.7	648.6	653.5	658.4	658.4	663.3	670.2	675.1	686.9
30°	604.6	607.5	604.6	609.5	611.4	615.3	618.3	621.2	627.1	633.9	644.7
32.5°	557.5	556.5	557.5	559.5	565.4	568.3	570.3	573.2	579.1	585.0	593.8
35°	501.7	503.6	504.6	508.5	508.5	513.4	514.4	516.4	525.2	529.1	536.0
37.5°	442.9	444.8	445.8	447.8	451.7	453.7	456.6	459.5	465.4	472.3	476.2
40°	391.0	391.0	391.9	393.9	396.8	397.8	400.7	404.7	408.6	414.5	418.4
42.5°	342.0	342.9	342.0	343.9	346.9	350.8	349.8	354.7	355.7	359.6	362.5
45°	303.7	303.7	301.8	303.7	303.7	307.7	306.7	308.6	307.7	309.6	307.7
47.5°	267.5	268.5	267.5	268.5	268.5	268.5	269.5	267.5	268.5	265.5	259.7
50°	239.1	240.1	238.1	239.1	238.1	237.1	238.1	235.2	234.2	230.3	224.4
52.5°	214.6	213.6	212.6	212.6	212.6	211.6	210.7	207.7	204.8	200.9	194.0
55°	193.0	192.0	191.1	191.1	189.1	188.1	188.1	185.2	182.2	177.3	169.5
57.5°	173.4	172.4	171.5	171.5	170.5	168.5	168.5	165.6	161.7	155.8	148.9
60°	154.8	154.8	154.8	153.8	153.8	151.9	151.9	148.9	145.0	139.1	131.3
62.5°	138.2	137.2	137.2	137.2	137.2	136.2	135.2	133.3	129.3	123.5	116.6
65°	118.6	118.6	118.6	118.6	117.6	117.6	117.6	114.6	112.7	106.8	99.9
67.5°	97.0	97.0	97.0	97.0	96.0	97.0	97.0	95.0	93.1	87.2	81.3
70°	77.4	76.4	75.4	76.4	75.4	75.4	76.4	74.5	73.5	68.6	62.7
72.5°	56.8	57.8	56.8	56.8	56.8	55.9	56.8	55.9	53.9	50.0	46.1
75°	40.2	41.2	41.2	40.2	40.2	40.2	39.2	39.2	37.2	34.3	32.3
77.5°	27.4	27.4	27.4	27.4	26.5	26.5	26.5	25.5	24.5	22.5	20.6
80°	17.6	17.6	17.6	17.6	16.7	16.7	16.7	15.7	15.7	13.7	11.8
82.5°	10.8	10.8	10.8	10.8	10.8	10.8	9.8	9.8	8.8	7.8	6.9
85°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	4.9	4.9	3.9	2.9
87.5°	2.0	2.0	2.9	2.9	2.9	2.9	2.9	2.9	2.0	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P252575

CATALOG NUMBER: LD6B20D010 EU6B10209024 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	847.5	847.5	847.5	847.5	847.5	847.5	847.5	847.5	847.5	847.5	847.5
2.5°	843.6	844.6	844.6	844.6	847.5	848.5	845.6	842.7	848.5	847.5	849.5
5°	833.8	836.8	838.7	839.7	842.7	844.6	841.7	840.7	845.6	846.6	847.5
7.5°	822.1	827.0	831.9	833.8	837.8	839.7	838.7	838.7	844.6	846.6	846.6
10°	814.2	821.1	827.0	831.9	836.8	839.7	839.7	840.7	847.5	849.5	851.5
12.5°	812.3	821.1	828.9	835.8	839.7	844.6	845.6	848.5	855.4	858.3	858.3
15°	807.4	819.1	828.9	837.8	843.6	849.5	851.5	857.3	865.2	867.1	869.1
17.5°	798.6	810.3	822.1	832.9	840.7	845.6	851.5	857.3	867.1	870.1	871.1
20°	782.9	796.6	808.4	819.1	827.0	833.8	839.7	846.6	855.4	859.3	860.3
22.5°	759.4	773.1	784.8	796.6	804.4	810.3	816.2	824.0	832.9	836.8	836.8
25°	731.0	743.7	756.4	765.2	773.1	779.9	782.9	791.7	800.5	805.4	805.4
27.5°	694.7	706.5	718.2	728.0	732.9	738.8	743.7	751.5	758.4	762.3	766.2
30°	648.6	660.4	671.2	681.0	686.9	692.7	697.6	703.5	710.4	715.3	716.3
32.5°	598.7	608.5	619.3	629.0	634.9	636.9	641.8	647.7	653.5	657.5	658.4
35°	543.8	550.7	557.5	566.3	572.2	572.2	577.1	581.0	585.9	594.8	592.8
37.5°	479.1	488.9	493.8	496.8	500.7	504.6	505.6	510.5	516.4	518.3	521.3
40°	418.4	421.3	424.3	424.3	428.2	428.2	428.2	429.2	435.0	436.0	439.9
42.5°	357.6	357.6	354.7	351.8	352.7	351.8	346.9	346.9	349.8	353.7	353.7
45°	300.8	293.9	285.1	278.3	273.4	271.4	265.5	265.5	264.6	265.5	269.5
47.5°	252.8	241.0	226.3	212.6	207.7	203.8	195.0	191.1	189.1	190.1	192.0
50°	212.6	199.9	183.2	166.6	157.8	152.9	142.1	135.2	134.2	132.3	136.2
52.5°	183.2	167.6	149.9	130.3	121.5	113.7	101.9	96.0	92.1	92.1	93.1
55°	157.8	141.1	121.5	101.9	93.1	87.2	75.4	67.6	63.7	62.7	65.6
57.5°	136.2	120.5	100.9	81.3	72.5	65.6	53.9	47.0	44.1	42.1	43.1
60°	119.5	103.9	84.3	65.6	57.8	50.0	40.2	32.3	28.4	28.4	29.4
62.5°	103.9	89.2	71.5	53.9	47.0	40.2	29.4	22.5	19.6	18.6	19.6
65°	88.2	74.5	59.8	45.1	38.2	32.3	23.5	17.6	13.7	12.7	13.7
67.5°	71.5	60.7	48.0	36.3	30.4	25.5	17.6	12.7	9.8	8.8	9.8
70°	55.9	46.1	36.3	26.5	22.5	18.6	12.7	9.8	6.9	5.9	6.9
72.5°	40.2	33.3	25.5	18.6	15.7	12.7	8.8	6.9	4.9	3.9	4.9
75°	27.4	22.5	16.7	11.8	9.8	8.8	5.9	3.9	2.9	2.9	2.9
77.5°	17.6	13.7	10.8	7.8	5.9	4.9	2.9	2.0	2.0	2.0	2.0
80°	9.8	7.8	5.9	3.9	2.9	2.9	2.0	2.0	1.0	1.0	1.0
82.5°	5.9	3.9	2.9	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0
85°	2.9	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
87.5°	1.0	1.0	1.0	1.0	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



TEST NUMBER: P252575

CATALOG NUMBER: LD6B20D010 EU6B10209024 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	847.5	847.5	847.5	847.5	847.5	847.5	847.5	847.5	847.5	847.5	847.5
2.5°	845.6	846.6	843.6	847.5	844.6	848.5	848.5	844.6	845.6	843.6	847.5
5°	843.6	843.6	841.7	844.6	840.7	844.6	843.6	836.8	838.7	834.8	838.7
7.5°	843.6	841.7	838.7	841.7	836.8	839.7	835.8	828.9	827.0	822.1	822.1
10°	846.6	843.6	839.7	840.7	835.8	836.8	830.9	821.1	818.2	812.3	810.3
12.5°	853.4	850.5	844.6	846.6	839.7	839.7	831.9	820.1	814.2	806.4	804.4
15°	863.2	858.3	851.5	852.4	845.6	841.7	831.9	818.2	810.3	799.5	796.6
17.5°	865.2	860.3	851.5	851.5	842.7	837.8	826.0	810.3	800.5	789.7	783.9
20°	854.4	849.5	839.7	838.7	830.9	824.0	811.3	795.6	785.8	774.1	769.2
22.5°	831.9	826.0	817.2	816.2	808.4	804.4	790.7	775.0	765.2	753.5	749.6
25°	798.6	795.6	786.8	785.8	779.0	774.1	762.3	747.6	738.8	727.0	723.1
27.5°	759.4	756.4	747.6	747.6	739.8	736.8	726.1	712.3	705.5	694.7	689.8
30°	712.3	708.4	703.5	702.5	695.7	692.7	682.9	670.2	663.3	654.5	652.6
32.5°	656.5	653.5	650.6	649.6	642.8	639.8	633.0	620.2	614.4	606.5	603.6
35°	591.8	589.9	586.9	585.9	583.0	580.1	573.2	563.4	560.5	554.6	551.6
37.5°	517.3	519.3	517.3	517.3	514.4	515.4	509.5	503.6	500.7	496.8	494.8
40°	437.0	440.9	443.9	443.9	442.9	446.8	445.8	440.9	439.9	438.0	437.0
42.5°	355.7	357.6	363.5	367.4	366.5	376.3	377.2	381.2	384.1	382.1	383.1
45°	270.4	276.3	284.1	288.1	293.0	305.7	312.6	320.4	327.3	331.2	330.2
47.5°	195.0	201.8	210.7	216.5	225.4	241.0	258.7	268.5	278.3	283.2	288.1
50°	141.1	148.0	158.7	167.6	173.4	195.0	213.6	226.3	237.1	244.0	248.9
52.5°	99.0	106.8	118.6	126.4	135.2	155.8	177.3	192.0	203.8	212.6	217.5
55°	68.6	77.4	88.2	96.0	105.8	127.4	148.0	163.6	176.4	184.2	190.1
57.5°	48.0	55.9	66.6	73.5	83.3	103.9	124.4	140.1	152.9	160.7	167.6
60°	32.3	40.2	51.0	57.8	65.6	86.2	104.8	121.5	133.3	141.1	148.0
62.5°	22.5	29.4	40.2	47.0	53.9	71.5	89.2	103.9	115.6	124.4	130.3
65°	17.6	23.5	32.3	38.2	45.1	59.8	74.5	87.2	99.0	107.8	111.7
67.5°	12.7	18.6	25.5	30.4	35.3	48.0	60.7	70.5	81.3	88.2	93.1
70°	8.8	12.7	18.6	22.5	26.5	36.3	46.1	54.9	62.7	67.6	71.5
72.5°	6.9	8.8	12.7	15.7	18.6	25.5	33.3	40.2	46.1	50.0	53.9
75°	3.9	5.9	8.8	10.8	12.7	17.6	22.5	27.4	31.4	34.3	36.3
77.5°	2.0	2.9	4.9	5.9	7.8	10.8	14.7	17.6	20.6	22.5	24.5
80°	2.0	2.0	2.9	2.9	3.9	5.9	7.8	9.8	11.8	13.7	14.7
82.5°	1.0	1.0	2.0	2.0	2.0	2.9	3.9	5.9	6.9	7.8	8.8
85°	1.0	1.0	1.0	1.0	1.0	2.0	2.0	2.9	3.9	4.9	4.9
87.5°	0.0	0.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P252575

CATALOG NUMBER: LD6B20D010 EU6B10209024 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	847.5	847.5	847.5	847.5	847.5	847.5	847.5	847.5
2.5°	844.6	846.6	845.6	847.5	844.6	843.6	845.6	842.7
5°	833.8	834.8	833.8	833.8	831.9	829.9	831.9	828.9
7.5°	817.2	817.2	814.2	814.2	810.3	808.4	808.4	807.4
10°	803.5	800.5	797.6	798.6	792.7	790.7	789.7	788.8
12.5°	796.6	794.6	789.7	789.7	783.9	781.9	780.9	779.9
15°	788.8	784.8	780.9	779.9	775.0	773.1	772.1	770.1
17.5°	775.0	772.1	767.2	767.2	762.3	761.3	759.4	758.4
20°	760.3	756.4	752.5	752.5	746.6	746.6	743.7	744.7
22.5°	739.8	736.8	732.9	732.9	728.0	727.0	724.1	723.1
25°	715.3	711.4	708.4	707.4	703.5	701.6	700.6	698.6
27.5°	682.9	680.0	677.1	675.1	670.2	669.2	666.3	667.3
30°	642.8	640.8	639.8	637.9	632.0	630.0	630.0	627.1
32.5°	598.7	595.7	593.8	590.8	585.9	585.0	582.0	583.0
35°	544.8	540.9	537.9	538.9	533.0	532.0	530.1	531.1
37.5°	488.9	485.0	481.1	480.1	475.2	475.2	472.3	472.3
40°	431.1	427.2	425.2	425.2	419.4	420.3	417.4	416.4
42.5°	379.2	375.3	374.3	373.3	370.4	369.4	366.5	367.4
45°	330.2	329.2	329.2	327.3	324.3	323.3	324.3	324.3
47.5°	287.1	288.1	287.1	287.1	285.1	287.1	285.1	286.1
50°	250.8	252.8	252.8	252.8	251.8	252.8	252.8	253.8
52.5°	220.5	223.4	222.4	223.4	222.4	224.4	223.4	224.4
55°	194.0	196.0	196.9	197.9	197.9	197.9	197.9	197.9
57.5°	169.5	172.4	173.4	174.4	174.4	176.4	174.4	174.4
60°	149.9	152.9	153.8	154.8	154.8	155.8	153.8	154.8
62.5°	132.3	135.2	135.2	136.2	136.2	136.2	134.2	135.2
65°	114.6	115.6	116.6	116.6	115.6	115.6	114.6	115.6
67.5°	95.0	96.0	95.0	95.0	94.1	94.1	92.1	93.1
70°	73.5	73.5	74.5	73.5	72.5	73.5	72.5	71.5
72.5°	54.9	54.9	54.9	53.9	53.9	52.9	53.9	53.9
75°	37.2	37.2	38.2	38.2	38.2	38.2	37.2	37.2
77.5°	24.5	24.5	24.5	24.5	25.5	24.5	24.5	24.5
80°	15.7	15.7	16.7	16.7	15.7	15.7	15.7	15.7
82.5°	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
85°	5.9	5.9	5.9	5.9	4.9	4.9	4.9	4.9
87.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.0	2.0
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)