

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: P252681

Luminaire Tested: **LD6B20D010 EU6B10209030 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252681
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: LD6B20D010 EU6B10209030 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1625.0 lumens
Efficiency: N/A
Efficacy: 78.1 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

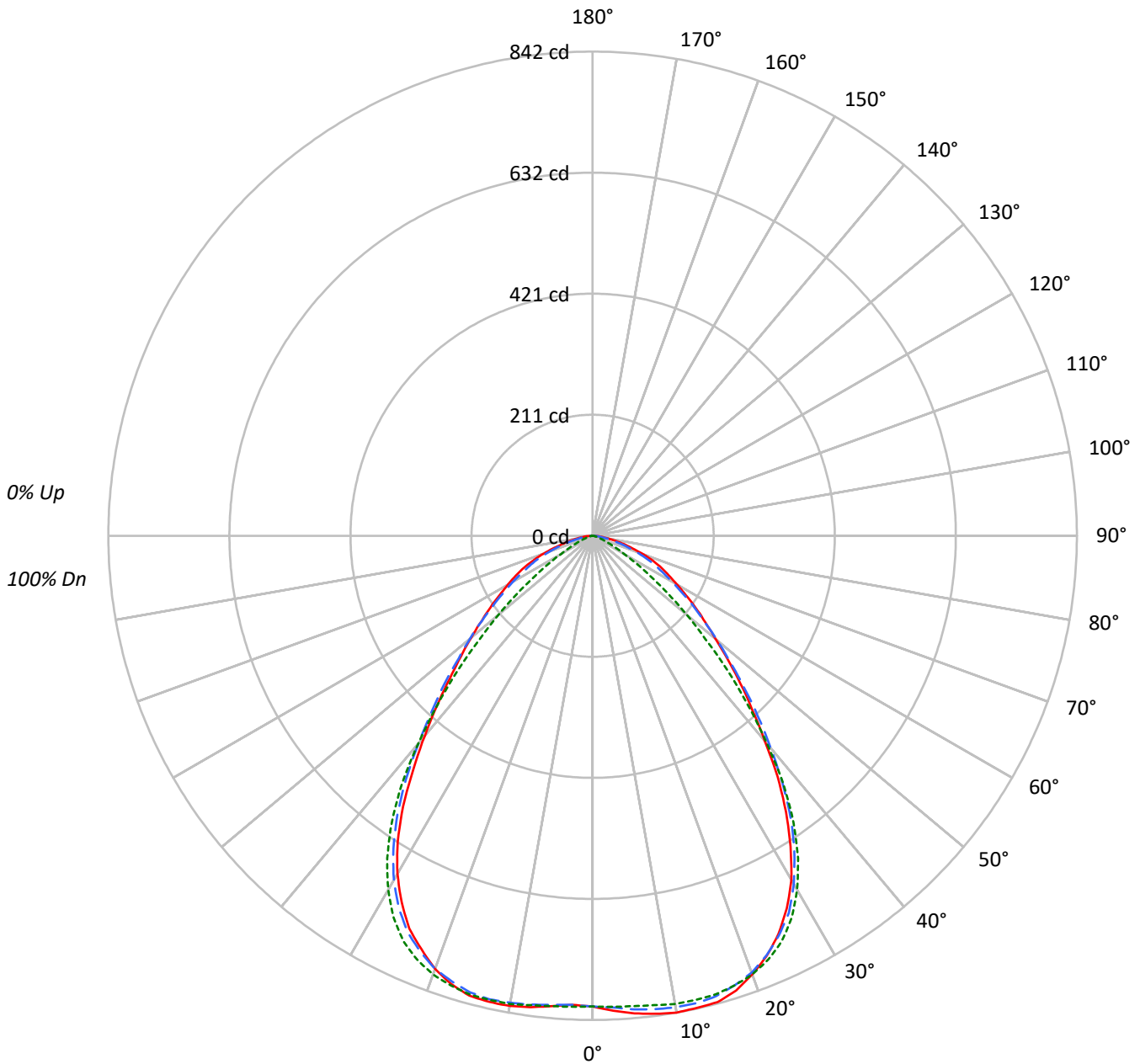
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252681

CATALOG NUMBER: LD6B20D010 EU6B10209030 6LBDW1H

Luminous Intensity Polar Plot





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CATALOG NUMBER: LD6B20D010 EU6B10209030 6LBDW1H

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°	53413	53413	53413
5°	54605	53767	53767
10°	55773	54773	55005
15°	56708	55769	55925
20°	56361	56361	55632
25°	55018	56019	54270
30°	52078	53562	51121
35°	46671	48511	45748
40°	39645	40139	38657
45°	33547	30659	32376
50°	28328	21629	27972
55°	24898	13956	24625
60°	22064	8312	22208
65°	20377	5002	20377
70°	17664	2880	17225
75°	14015	1739	13133
80°	10445	1315	9994
85°	9507	898	8683



TEST NUMBER: P252681

CATALOG NUMBER: LD6B20D010 EU6B10209030 6LBDW1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.8	4.9
10°-20°	233.3	14.4
20°-30°	350.8	21.6
30°-40°	368.9	22.7
40°-50°	275.6	17.0
50°-60°	171.6	10.6
60°-70°	97.6	6.0
70°-80°	40.2	2.5
80°-90°	8.3	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°	663.0	40.8
0°-40°	1031.8	63.5
0°-60°	1479.0	91.0
0°-90°	1625.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1625.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	819	819	819	819	819	
5°	834	827	821	819	821	80
15°	840	829	826	822	828	236
25°	764	767	778	761	754	350
35°	586	601	609	592	574	364
45°	364	372	332	365	351	282
55°	219	214	123	211	216	197
65°	132	118	32	118	132	130
75°	56	44	7	43	52	60
85°	13	8	1	7	12	14
90°	0	0	0	0	0	



TEST NUMBER: P252681

CATALOG NUMBER: LD6B20D010 EU6B10209030 6LBDW1H

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	818.7	818.7	818.7	818.7	818.7	818.7	818.7	818.7	818.7	818.7	818.7
2.5°	826.8	825.7	826.8	824.5	823.3	823.3	824.5	822.2	821.0	822.2	821.0
5°	833.8	831.4	832.6	831.4	829.1	829.1	830.3	826.8	826.8	828.0	826.8
7.5°	838.4	838.4	838.4	836.1	834.9	833.8	836.1	832.6	831.4	831.4	830.3
10°	841.9	840.7	841.9	839.6	837.2	836.1	838.4	836.1	833.8	836.1	832.6
12.5°	840.7	840.7	840.7	839.6	837.2	836.1	838.4	834.9	833.8	834.9	832.6
15°	839.6	836.1	837.2	836.1	832.6	832.6	833.8	830.3	828.0	831.4	829.1
17.5°	829.1	826.8	828.0	825.7	823.3	822.2	823.3	822.2	819.9	822.2	819.9
20°	811.8	811.8	812.9	810.6	808.3	807.1	809.4	807.1	804.8	808.3	808.3
22.5°	790.9	790.9	790.9	789.8	788.6	788.6	788.6	787.4	786.3	788.6	789.8
25°	764.3	763.1	764.3	765.4	764.3	763.1	764.3	764.3	762.0	766.6	766.6
27.5°	730.7	730.7	733.0	731.9	731.9	730.7	733.0	733.0	731.9	735.3	738.8
30°	691.3	689.0	691.3	691.3	692.5	692.5	693.6	693.6	693.6	697.1	699.4
32.5°	640.4	641.5	645.0	643.9	642.7	646.2	646.2	648.5	649.6	652.0	653.1
35°	586.0	587.1	587.1	588.3	590.6	588.3	594.1	592.9	594.1	598.7	601.0
37.5°	528.1	524.6	530.4	528.1	529.2	529.2	531.5	532.7	536.2	541.9	541.9
40°	465.5	466.7	469.0	470.2	471.3	471.3	471.3	474.8	475.9	482.9	481.7
42.5°	411.1	411.1	413.4	414.6	414.6	414.6	414.6	418.0	420.4	422.7	425.0
45°	363.6	360.1	362.5	362.5	364.8	363.6	365.9	368.2	369.4	372.9	371.7
47.5°	318.5	317.3	318.5	319.6	318.5	319.6	320.8	321.9	323.1	323.1	323.1
50°	279.1	279.1	280.2	281.4	281.4	281.4	281.4	282.6	282.6	284.9	282.6
52.5°	246.7	247.8	247.8	246.7	247.8	247.8	249.0	249.0	247.8	247.8	244.3
55°	218.9	217.7	218.9	217.7	218.9	218.9	217.7	217.7	216.5	215.4	214.2
57.5°	192.2	192.2	192.2	192.2	191.1	192.2	191.1	189.9	189.9	187.6	184.1
60°	169.1	169.1	169.1	169.1	169.1	167.9	169.1	167.9	165.6	163.3	158.6
62.5°	149.4	148.2	149.4	148.2	148.2	147.1	147.1	145.9	143.6	141.3	136.6
65°	132.0	133.2	132.0	132.0	130.9	129.7	129.7	128.5	125.1	122.7	118.1
67.5°	113.5	112.3	112.3	112.3	111.2	111.2	111.2	108.9	106.5	103.1	98.4
70°	92.6	92.6	92.6	91.5	91.5	90.3	90.3	89.2	86.9	84.5	78.7
72.5°	73.0	73.0	73.0	70.6	71.8	70.6	70.6	68.3	67.2	63.7	60.2
75°	55.6	55.6	54.4	54.4	53.3	52.1	52.1	51.0	49.8	47.5	44.0
77.5°	40.5	40.5	40.5	39.4	38.2	37.1	37.1	35.9	34.7	33.6	31.3
80°	27.8	27.8	27.8	27.8	26.6	25.5	25.5	24.3	24.3	23.2	20.8
82.5°	18.5	18.5	18.5	18.5	17.4	17.4	17.4	16.2	15.1	15.1	12.7
85°	12.7	12.7	11.6	11.6	11.6	11.6	10.4	10.4	9.3	8.1	8.1
87.5°	6.9	6.9	6.9	6.9	5.8	5.8	5.8	5.8	4.6	4.6	3.5
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: P252681

CATALOG NUMBER: LD6B20D010 EU6B10209030 6LBDW1H

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	818.7	818.7	818.7	818.7	818.7	818.7	818.7	818.7	818.7	818.7	818.7
2.5°	824.5	824.5	823.3	819.9	821.0	819.9	821.0	819.9	816.4	819.9	816.4
5°	829.1	830.3	828.0	823.3	824.5	823.3	823.3	822.2	818.7	821.0	818.7
7.5°	833.8	832.6	831.4	826.8	828.0	826.8	826.8	824.5	821.0	823.3	819.9
10°	836.1	836.1	833.8	829.1	829.1	828.0	829.1	828.0	823.3	826.8	824.5
12.5°	836.1	834.9	834.9	829.1	830.3	829.1	830.3	828.0	824.5	826.8	825.7
15°	832.6	832.6	831.4	825.7	826.8	826.8	828.0	825.7	822.2	825.7	823.3
17.5°	825.7	825.7	824.5	819.9	822.2	822.2	823.3	821.0	817.6	819.9	819.9
20°	811.8	812.9	812.9	809.4	811.8	811.8	812.9	811.8	810.6	811.8	809.4
22.5°	795.5	797.9	797.9	794.4	796.7	796.7	800.2	799.0	796.7	797.9	796.7
25°	771.2	773.5	775.9	773.5	775.9	775.9	779.3	778.2	775.9	778.2	774.7
27.5°	743.4	744.6	746.9	744.6	748.1	746.9	750.4	749.2	745.8	749.2	748.1
30°	704.1	708.7	712.2	708.7	712.2	712.2	714.5	713.3	712.2	711.0	711.0
32.5°	660.1	664.7	664.7	663.5	665.9	665.9	667.0	664.7	663.5	664.7	665.9
35°	605.6	608.0	610.3	609.1	610.3	611.4	610.3	611.4	608.0	609.1	609.1
37.5°	546.6	548.9	548.9	545.4	547.7	547.7	545.4	545.4	543.1	545.4	540.8
40°	484.0	481.7	482.9	480.6	478.3	478.3	477.1	472.5	470.2	471.3	472.5
42.5°	422.7	422.7	419.2	413.4	407.6	407.6	404.1	401.8	397.2	399.5	398.4
45°	370.6	364.8	360.1	350.9	347.4	345.1	339.3	333.5	331.2	332.3	331.2
47.5°	320.8	316.1	304.6	291.8	288.3	284.9	277.9	271.0	268.7	266.3	266.3
50°	279.1	271.0	258.2	244.3	238.5	232.8	223.5	216.5	211.9	213.1	213.1
52.5°	240.9	231.6	216.5	199.2	192.2	185.3	177.2	169.1	165.6	164.4	164.4
55°	207.3	196.9	181.8	162.1	156.3	148.2	137.8	128.5	123.9	122.7	125.1
57.5°	177.2	167.9	150.5	130.9	123.9	115.8	105.4	97.3	91.5	90.3	91.5
60°	152.9	140.1	125.1	106.5	97.3	90.3	78.7	71.8	66.0	63.7	64.8
62.5°	128.5	117.0	101.9	83.4	76.4	69.5	59.1	51.0	46.3	45.2	46.3
65°	110.0	98.4	84.5	68.3	61.4	54.4	45.2	37.1	33.6	32.4	33.6
67.5°	91.5	81.1	69.5	54.4	48.6	42.8	33.6	27.8	23.2	22.0	23.2
70°	74.1	64.8	53.3	42.8	37.1	32.4	25.5	19.7	16.2	15.1	16.2
72.5°	55.6	48.6	40.5	31.3	27.8	24.3	18.5	13.9	11.6	10.4	11.6
75°	40.5	34.7	29.0	22.0	19.7	17.4	12.7	9.3	8.1	6.9	8.1
77.5°	27.8	24.3	19.7	15.1	12.7	11.6	8.1	6.9	5.8	4.6	4.6
80°	18.5	16.2	12.7	10.4	9.3	8.1	5.8	4.6	3.5	3.5	3.5
82.5°	11.6	9.3	8.1	5.8	4.6	4.6	3.5	2.3	2.3	2.3	2.3
85°	6.9	5.8	4.6	3.5	2.3	2.3	1.2	1.2	1.2	1.2	1.2
87.5°	3.5	2.3	2.3	1.2	1.2	1.2	1.2	1.2	0.0	0.0	1.2
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: P252681

CATALOG NUMBER: LD6B20D010 EU6B10209030 6LBDW1H

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	818.7	818.7	818.7	818.7	818.7	818.7	818.7	818.7	818.7	818.7	818.7
2.5°	818.7	816.4	816.4	817.6	818.7	819.9	817.6	816.4	816.4	819.9	817.6
5°	818.7	817.6	817.6	817.6	819.9	821.0	818.7	817.6	818.7	822.2	821.0
7.5°	822.2	819.9	821.0	821.0	822.2	824.5	822.2	821.0	822.2	825.7	823.3
10°	824.5	822.2	823.3	822.2	825.7	826.8	824.5	823.3	824.5	829.1	828.0
12.5°	825.7	824.5	824.5	823.3	826.8	828.0	825.7	824.5	825.7	829.1	828.0
15°	823.3	822.2	822.2	822.2	824.5	826.8	823.3	822.2	822.2	825.7	824.5
17.5°	818.7	816.4	816.4	816.4	817.6	818.7	815.2	814.1	812.9	816.4	815.2
20°	810.6	808.3	806.0	806.0	807.1	807.1	804.8	801.3	801.3	802.5	800.2
22.5°	795.5	794.4	792.1	790.9	793.2	792.1	787.4	784.0	782.8	784.0	781.7
25°	774.7	772.4	771.2	770.1	771.2	770.1	765.4	760.8	760.8	760.8	757.3
27.5°	745.8	743.4	742.3	742.3	743.4	741.1	736.5	731.9	729.5	729.5	726.1
30°	708.7	708.7	707.5	706.4	705.2	705.2	698.3	693.6	691.3	692.5	690.2
32.5°	663.5	662.4	661.2	657.7	658.9	657.7	652.0	648.5	645.0	642.7	641.5
35°	605.6	605.6	604.5	604.5	604.5	603.3	597.5	594.1	591.7	590.6	587.1
37.5°	541.9	540.8	539.6	539.6	539.6	539.6	536.2	532.7	532.7	531.5	529.2
40°	470.2	471.3	472.5	471.3	474.8	478.3	473.6	471.3	470.2	473.6	469.0
42.5°	400.7	399.5	405.3	406.5	406.5	412.2	413.4	414.6	413.4	415.7	415.7
45°	333.5	332.3	338.1	340.5	346.2	353.2	356.7	362.5	364.8	367.1	364.8
47.5°	269.8	274.4	279.1	284.9	289.5	301.1	308.0	313.8	316.1	319.6	319.6
50°	216.5	221.2	229.3	233.9	239.7	253.6	265.2	273.3	277.9	281.4	280.2
52.5°	166.8	174.9	185.3	189.9	198.0	214.2	227.0	236.2	242.0	245.5	246.7
55°	128.5	135.5	145.9	152.9	161.0	178.3	194.5	205.0	210.8	215.4	217.7
57.5°	95.0	103.1	114.6	120.4	129.7	149.4	163.3	176.0	183.0	188.8	189.9
60°	69.5	77.6	88.0	95.0	104.2	123.9	140.1	151.7	159.8	164.4	166.8
62.5°	49.8	57.9	68.3	75.3	83.4	100.7	117.0	128.5	136.6	142.4	145.9
65°	35.9	44.0	54.4	60.2	67.2	83.4	98.4	110.0	118.1	125.1	127.4
67.5°	26.6	32.4	41.7	47.5	54.4	67.2	79.9	90.3	98.4	104.2	106.5
70°	19.7	24.3	32.4	35.9	40.5	52.1	62.5	71.8	78.7	83.4	85.7
72.5°	13.9	17.4	23.2	26.6	30.1	39.4	47.5	54.4	59.1	63.7	66.0
75°	9.3	11.6	16.2	18.5	20.8	27.8	33.6	39.4	42.8	46.3	47.5
77.5°	5.8	8.1	11.6	12.7	15.1	18.5	23.2	26.6	29.0	31.3	33.6
80°	3.5	4.6	6.9	8.1	9.3	12.7	15.1	17.4	19.7	22.0	23.2
82.5°	2.3	3.5	4.6	4.6	5.8	6.9	9.3	11.6	12.7	13.9	15.1
85°	1.2	1.2	2.3	2.3	3.5	3.5	4.6	5.8	6.9	8.1	9.3
87.5°	1.2	1.2	1.2	1.2	2.3	2.3	3.5	3.5	3.5	4.6	4.6
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: P252681

CATALOG NUMBER: LD6B20D010 EU6B10209030 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	818.7	818.7	818.7	818.7	818.7	818.7	818.7	818.7
2.5°	815.2	818.7	815.2	817.6	816.4	816.4	815.2	816.4
5°	818.7	823.3	818.7	822.2	819.9	819.9	819.9	821.0
7.5°	822.2	826.8	823.3	826.8	825.7	824.5	824.5	826.8
10°	825.7	829.1	826.8	830.3	829.1	828.0	828.0	830.3
12.5°	825.7	830.3	828.0	831.4	830.3	829.1	829.1	830.3
15°	822.2	828.0	824.5	828.0	826.8	825.7	825.7	828.0
17.5°	811.8	816.4	814.1	816.4	816.4	815.2	816.4	817.6
20°	797.9	801.3	799.0	801.3	801.3	799.0	800.2	801.3
22.5°	778.2	781.7	779.3	781.7	780.5	779.3	779.3	778.2
25°	753.9	758.5	755.0	757.3	755.0	752.7	752.7	753.9
27.5°	723.8	727.2	722.6	724.9	722.6	720.3	720.3	719.1
30°	684.4	685.5	682.1	684.4	682.1	680.9	678.6	678.6
32.5°	636.9	638.1	634.6	634.6	632.3	632.3	627.6	631.1
35°	581.3	582.5	581.3	580.2	576.7	575.5	574.4	574.4
37.5°	523.4	523.4	519.9	518.8	516.5	514.2	515.3	511.8
40°	464.4	463.2	459.7	460.9	459.7	456.3	455.1	453.9
42.5°	408.8	408.8	405.3	406.5	404.1	403.0	399.5	400.7
45°	360.1	360.1	356.7	356.7	355.5	352.0	353.2	350.9
47.5°	316.1	316.1	315.0	315.0	311.5	310.3	310.3	310.3
50°	277.9	277.9	277.9	277.9	276.8	275.6	274.4	275.6
52.5°	245.5	247.8	246.7	246.7	245.5	244.3	243.2	243.2
55°	216.5	217.7	217.7	218.9	217.7	216.5	217.7	216.5
57.5°	191.1	193.4	193.4	193.4	193.4	193.4	192.2	191.1
60°	169.1	170.2	170.2	171.4	171.4	171.4	170.2	170.2
62.5°	147.1	149.4	150.5	150.5	151.7	150.5	150.5	150.5
65°	129.7	132.0	133.2	132.0	133.2	133.2	132.0	132.0
67.5°	108.9	111.2	111.2	111.2	111.2	112.3	111.2	111.2
70°	88.0	90.3	89.2	90.3	90.3	90.3	90.3	90.3
72.5°	67.2	68.3	69.5	69.5	70.6	69.5	69.5	69.5
75°	48.6	51.0	51.0	51.0	51.0	52.1	52.1	52.1
77.5°	34.7	35.9	35.9	37.1	37.1	37.1	37.1	38.2
80°	24.3	24.3	25.5	25.5	26.6	26.6	26.6	26.6
82.5°	16.2	17.4	17.4	17.4	17.4	17.4	17.4	17.4
85°	9.3	10.4	10.4	10.4	10.4	11.6	11.6	11.6
87.5°	5.8	5.8	5.8	5.8	5.8	5.8	4.6	4.6
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)