

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P857208

Luminaire Tested: **LX4C20D010 EX4C209050 4LBLWWH**

Issue Date: 2/14/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P857208  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/14/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LX4C20D010 EX4C209050 4LBLWWH  
Description: 4 INCH 2000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS  
AND 4LRLWW TRIM WITH H FINISH  
Light Source: -  
Ballast/Driver: -

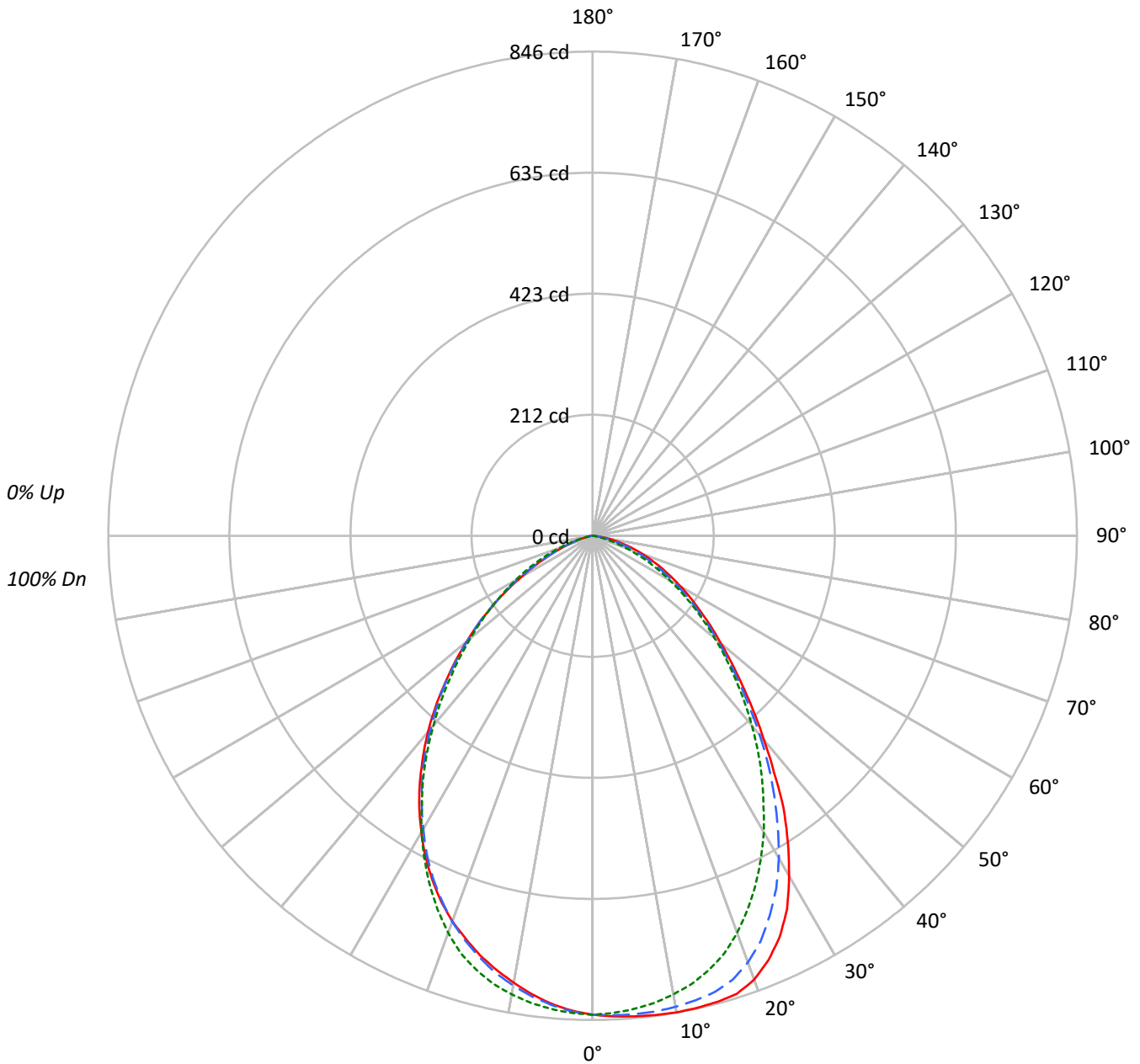
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1577.0 lumens  
Efficiency: N/A  
Efficacy: 72.3 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.09 / 1.17  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 21.8  
Input Voltage (V):  
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	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	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	88					88			
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77					77			
3	95	86	79	74	93	85	78	73	82	76	72	79	75	71	77	73	70	68					68			
4	88	78	70	64	86	77	69	64	74	68	63	72	67	62	70	65	62	60					60			
5	82	71	63	57	80	69	62	57	67	61	56	66	60	55	64	59	55	53					53			
6	76	64	56	51	74	63	56	50	62	55	50	60	54	50	59	53	49	47					47			
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43					43			
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	40	39					39			
9	62	50	43	38	61	50	42	37	49	42	37	47	41	37	47	41	37	35					35			
10	59	47	39	34	58	46	39	34	45	39	34	44	38	34	43	38	34	32					32			

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

	0°	90°	180°
0°	102804	102804	102804
5°	103949	102358	101248
10°	105475	101496	98926
15°	107206	99880	96561
20°	107885	96485	93700
25°	104797	91268	89872
30°	97386	84832	84874
35°	87181	77328	78963
40°	74638	69314	71847
45°	64249	61122	63415
50°	55847	53210	54815
55°	49156	45772	45365
60°	43736	38207	35185
65°	38372	30581	25436
70°	32939	21624	17242
75°	26724	12531	10063
80°	19102	5448	5023
85°	7189	2255	2255



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.9	5.0
10°-20°	223.2	14.2
20°-30°	318.8	20.2
30°-40°	333.5	21.1
40°-50°	279.4	17.7
50°-60°	195.6	12.4
60°-70°	106.5	6.8
70°-80°	37.0	2.3
80°-90°	4.2	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°	620.9	39.4
0°-40°	954.3	60.5
0°-60°	1429.3	90.6
0°-90°	1577.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1577.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	837	837	837	837	837	
5°	843	839	830	823	821	81
15°	843	825	785	763	759	238
25°	773	732	673	660	663	353
35°	581	553	516	520	526	360
45°	370	361	352	363	365	288
55°	230	222	214	214	212	207
65°	132	120	105	88	88	131
75°	56	46	26	21	21	61
85°	5	3	2	2	2	9
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°	836.8	836.8	836.8	836.8	836.8	836.8	836.8	836.8	836.8	836.8	836.8
2.5°	840.7	839.7	840.0	840.0	840.0	839.7	840.0	839.7	839.7	839.4	838.7
5°	842.9	842.3	842.3	842.3	841.9	841.6	841.6	841.3	840.7	840.3	839.0
7.5°	844.5	843.9	843.9	843.6	843.2	842.9	842.6	841.6	840.7	840.0	838.4
10°	845.5	844.5	844.5	843.9	843.2	842.9	842.3	841.0	839.7	838.1	835.8
12.5°	844.8	843.9	843.6	842.9	841.6	841.0	840.3	838.7	836.5	834.2	831.3
15°	842.9	842.3	841.6	840.7	839.0	838.1	837.4	834.9	832.0	828.7	825.2
17.5°	839.0	838.1	836.8	835.5	833.3	832.3	830.7	827.5	823.3	818.8	813.3
20°	825.2	824.6	823.3	821.0	817.5	816.2	813.9	809.8	804.3	798.8	793.0
22.5°	802.4	801.4	799.5	797.5	794.3	792.1	790.1	784.3	778.2	772.4	767.0
25°	773.1	772.1	769.5	767.0	763.7	759.9	757.9	753.4	747.3	739.9	731.9
27.5°	735.4	732.2	731.2	728.3	723.5	722.2	719.3	713.5	707.7	701.3	694.5
30°	686.5	686.5	684.6	683.3	678.8	677.5	674.3	668.1	664.9	655.9	650.8
32.5°	634.7	634.0	632.4	631.5	628.9	626.6	623.4	620.2	613.1	608.6	601.5
35°	581.3	577.4	578.0	576.1	574.5	571.9	571.6	568.1	561.6	559.0	552.6
37.5°	520.4	518.8	521.1	518.2	516.6	516.9	514.3	512.1	509.5	505.0	503.7
40°	465.4	466.7	466.4	463.8	465.1	463.5	460.9	458.6	457.3	454.4	453.5
42.5°	416.1	414.2	413.6	413.6	413.9	413.9	412.6	411.0	411.0	408.1	405.2
45°	369.8	369.8	369.2	371.1	368.2	368.2	367.2	366.9	365.6	365.0	361.4
47.5°	329.9	329.6	329.2	328.9	328.6	328.6	326.7	325.1	324.7	322.8	320.9
50°	292.2	294.2	293.5	291.9	291.3	291.6	290.3	289.3	289.0	285.8	286.1
52.5°	260.7	260.4	261.0	260.1	258.4	258.8	257.5	256.2	254.9	253.3	252.0
55°	229.5	231.1	230.4	229.5	229.2	228.5	227.5	225.9	225.6	222.1	221.8
57.5°	203.4	203.1	202.4	200.8	200.5	199.5	199.5	198.3	196.3	194.4	192.8
60°	178.0	178.0	177.0	176.7	175.4	175.1	174.8	173.5	171.2	169.6	167.0
62.5°	153.5	154.2	153.5	152.6	151.6	150.3	149.7	148.7	146.8	145.2	142.9
65°	132.0	131.6	131.3	130.0	129.7	128.4	128.1	126.2	124.2	122.9	120.4
67.5°	111.4	110.4	110.4	109.7	109.1	108.1	107.5	105.6	103.3	102.0	99.4
70°	91.7	91.1	91.1	91.1	89.5	88.5	88.2	87.2	84.0	82.7	80.1
72.5°	73.7	73.4	73.1	72.1	71.1	71.1	69.8	67.9	66.3	64.7	62.8
75°	56.3	57.0	56.3	55.0	54.7	54.1	53.1	51.5	49.9	48.0	45.7
77.5°	41.2	40.6	39.9	39.9	39.3	38.0	37.7	36.4	34.4	33.1	30.9
80°	27.0	26.7	26.1	25.4	25.1	24.8	24.5	23.2	21.2	20.3	18.3
82.5°	14.8	14.5	14.5	14.2	13.2	13.2	12.9	11.6	10.6	10.0	9.0
85°	5.1	5.1	5.1	4.8	4.8	4.8	4.5	4.2	3.9	3.5	2.9
87.5°	0.6	0.3	0.6	0.3	0.6	0.3	0.3	0.3	0.3	0.3	0.3
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°	836.8	836.8	836.8	836.8	836.8	836.8	836.8	836.8	836.8	836.8	836.8
2.5°	838.1	837.4	837.1	836.8	836.5	836.2	835.8	835.2	834.9	834.5	833.9
5°	838.1	836.8	836.2	835.2	834.5	833.9	832.9	832.0	831.0	830.0	829.1
7.5°	836.8	834.9	833.6	831.6	831.0	830.0	828.1	826.8	825.2	823.3	821.0
10°	833.6	831.3	828.7	826.2	825.2	823.6	821.0	818.8	816.2	813.6	811.4
12.5°	828.4	824.9	821.7	818.1	816.2	814.6	811.0	807.8	804.6	801.7	797.9
15°	820.7	816.5	812.3	807.5	805.3	803.3	798.2	794.3	789.2	785.3	781.4
17.5°	808.2	801.7	796.6	790.4	787.2	785.0	780.5	774.4	769.5	765.3	760.8
20°	786.6	780.5	773.4	766.6	763.1	760.2	753.8	747.3	742.5	738.0	733.2
22.5°	758.3	750.5	745.4	737.0	734.1	730.6	722.9	717.1	711.6	707.1	702.6
25°	723.8	717.1	710.0	702.3	698.7	694.5	688.1	682.0	678.4	673.3	667.8
27.5°	684.2	678.8	670.1	663.3	659.8	656.6	650.4	645.0	639.8	636.3	631.1
30°	642.4	636.0	628.2	621.2	619.2	615.4	609.9	605.7	600.2	598.0	595.7
32.5°	596.4	589.0	583.2	578.7	574.8	571.6	568.7	561.9	561.0	555.2	554.5
35°	546.2	543.0	537.5	533.6	530.4	528.1	523.3	520.1	516.6	515.6	513.3
37.5°	498.9	495.0	489.8	486.3	484.1	483.7	480.2	478.3	475.7	474.4	471.8
40°	449.3	447.7	443.2	442.5	439.0	438.7	436.7	434.5	432.2	432.2	432.6
42.5°	403.6	401.7	399.7	397.5	395.5	395.5	394.6	393.9	393.3	392.3	393.9
45°	360.8	358.2	356.9	354.7	355.6	353.7	353.1	353.1	352.1	351.8	354.0
47.5°	320.9	318.0	316.7	316.1	316.1	316.4	313.5	314.4	314.1	314.8	315.7
50°	284.5	281.9	280.0	280.0	280.3	279.0	277.8	278.7	277.8	278.4	280.6
52.5°	250.7	248.1	247.2	247.2	245.2	244.9	245.6	244.3	244.6	244.9	246.2
55°	219.5	217.9	216.3	214.7	215.0	214.3	213.1	212.7	213.4	213.7	215.3
57.5°	191.5	189.2	187.0	186.3	185.7	185.7	184.1	183.8	184.4	182.8	182.8
60°	164.8	163.5	160.6	159.6	159.6	158.0	156.7	157.4	155.8	155.5	155.8
62.5°	140.0	139.0	137.1	135.2	134.5	133.9	132.3	131.6	131.0	129.7	127.8
65°	118.4	116.2	113.9	112.6	111.7	110.1	109.1	107.8	105.9	105.2	103.3
67.5°	96.9	94.6	92.4	91.4	90.4	89.5	87.9	86.3	84.0	81.4	79.2
70°	77.9	75.0	73.7	71.1	70.5	69.2	66.9	65.3	63.1	60.2	57.9
72.5°	59.5	57.6	55.7	53.4	51.8	50.9	48.9	46.3	43.8	42.2	39.9
75°	42.8	41.8	39.3	36.7	36.0	34.8	32.5	30.9	29.0	26.4	24.5
77.5°	29.0	27.0	25.4	23.2	22.5	21.2	20.0	18.3	17.1	15.4	14.2
80°	17.1	15.4	14.5	12.9	12.2	11.6	10.6	9.3	8.4	7.7	7.4
82.5°	8.4	7.1	6.8	5.8	5.5	5.1	4.5	4.2	3.5	3.5	3.5
85°	2.9	2.3	2.3	1.9	1.6	1.6	1.6	1.6	1.6	1.6	1.6
87.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.6	0.3
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):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	836.8	836.8	836.8	836.8	836.8	836.8	836.8	836.8	836.8	836.8	836.8
2.5°	833.6	833.3	832.9	832.6	832.6	832.3	832.3	832.0	832.0	831.6	831.6
5°	827.8	826.8	826.2	825.5	825.5	824.6	823.9	823.3	823.0	823.0	822.3
7.5°	819.7	818.4	817.2	816.2	815.9	814.3	813.0	813.0	811.7	811.0	810.4
10°	809.1	806.9	804.9	804.0	802.7	801.7	800.1	799.1	798.2	796.6	796.2
12.5°	794.6	793.0	790.1	788.8	788.2	786.3	783.7	782.4	782.1	780.8	779.8
15°	778.2	774.7	772.1	770.5	770.5	767.3	766.0	764.1	762.8	761.8	761.5
17.5°	757.0	753.4	750.9	748.6	748.0	745.4	743.5	742.8	741.2	741.9	740.2
20°	729.6	726.7	724.8	721.9	721.9	720.3	719.6	718.0	717.4	716.7	717.4
22.5°	700.3	696.8	693.6	693.3	693.3	691.0	690.7	690.4	689.1	690.0	689.7
25°	665.9	663.3	661.4	661.1	661.1	659.8	658.5	659.1	660.1	659.8	660.7
27.5°	630.2	627.6	627.0	626.6	626.0	625.7	626.3	626.3	627.3	628.6	629.8
30°	591.5	590.9	589.9	589.6	589.0	590.6	591.2	592.2	591.9	593.8	595.1
32.5°	552.9	551.6	551.3	552.0	552.9	552.6	554.5	555.2	555.8	558.1	559.0
35°	514.0	513.7	513.0	513.0	513.3	515.9	515.9	518.2	519.5	520.1	522.7
37.5°	472.1	473.4	474.1	475.0	475.4	476.3	477.0	479.2	480.5	481.8	483.1
40°	433.8	433.2	436.1	434.2	434.8	437.7	439.0	438.7	440.6	442.5	443.8
42.5°	393.0	393.9	394.6	395.2	396.8	397.2	398.8	401.0	401.7	403.9	404.6
45°	353.4	353.7	355.0	356.3	357.2	359.8	360.5	361.4	363.4	363.4	364.3
47.5°	316.1	317.3	317.3	319.3	320.9	320.6	322.8	323.5	323.1	324.7	325.4
50°	280.3	282.3	281.9	283.2	283.9	284.2	286.1	286.8	285.5	287.1	287.4
52.5°	246.2	247.2	248.5	248.8	248.1	249.8	249.1	250.4	250.1	251.4	250.1
55°	215.0	214.7	214.7	215.3	214.7	215.3	216.0	214.7	213.7	215.0	214.7
57.5°	183.8	183.8	183.1	184.1	183.1	182.2	181.8	180.9	179.9	179.9	179.6
60°	154.5	153.8	152.6	152.2	152.2	150.6	150.0	148.7	148.7	147.4	146.1
62.5°	127.1	125.5	124.6	124.6	123.9	122.3	119.4	117.5	116.8	114.9	114.6
65°	101.4	99.8	98.8	96.9	95.3	94.6	91.7	89.5	88.5	86.6	86.9
67.5°	77.9	75.3	72.4	71.1	70.2	67.9	66.9	65.3	64.4	64.4	64.4
70°	56.0	53.7	50.9	49.9	49.2	47.3	46.3	46.0	47.0	46.7	47.0
72.5°	37.7	35.4	34.1	33.5	32.8	31.9	32.5	32.8	32.2	32.5	32.8
75°	22.9	22.2	21.2	20.9	20.9	21.2	20.9	20.9	21.2	21.2	21.6
77.5°	13.2	12.6	12.6	12.2	12.9	12.6	12.6	12.6	12.9	12.9	12.9
80°	7.1	7.1	7.1	7.1	7.4	7.1	7.4	7.4	7.4	7.4	7.4
82.5°	3.5	3.5	3.5	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.5
85°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
87.5°	0.3	0.6	0.6	0.6	0.6	0.6	0.3	0.3	0.3	0.3	0.3
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):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	836.8	836.8	836.8	836.8	836.8	836.8	836.8	836.8
2.5°	831.0	831.0	831.0	830.4	830.7	830.7	830.4	830.4
5°	822.0	821.7	821.0	821.0	820.4	821.0	820.7	821.0
7.5°	809.8	809.8	808.8	808.8	808.5	808.2	807.8	808.2
10°	795.3	795.3	794.6	794.3	794.6	793.3	793.3	793.0
12.5°	779.2	778.5	777.9	778.2	777.9	776.9	776.6	776.9
15°	760.5	759.6	759.9	758.9	758.9	758.6	759.2	759.2
17.5°	739.9	739.3	738.6	739.0	738.3	738.6	738.3	738.0
20°	717.1	716.7	716.7	715.5	715.8	715.5	715.8	716.7
22.5°	690.7	690.4	690.7	689.7	690.4	690.4	691.3	691.3
25°	661.7	661.4	662.0	662.4	662.7	663.6	662.7	663.0
27.5°	629.5	630.5	631.5	631.8	633.1	632.1	631.5	632.4
30°	597.0	597.0	596.7	598.0	599.0	599.9	598.3	598.3
32.5°	559.7	561.3	561.3	561.6	562.6	562.6	562.6	563.9
35°	524.0	524.9	525.2	524.0	524.6	524.3	526.5	526.5
37.5°	484.1	484.1	484.4	486.6	486.6	485.7	486.3	486.3
40°	446.1	446.4	445.1	445.8	447.4	446.7	447.4	448.0
42.5°	404.6	406.8	405.5	406.2	405.8	406.2	406.5	406.5
45°	365.0	365.6	365.6	365.9	366.6	367.2	365.3	365.0
47.5°	326.3	326.7	327.6	326.0	328.0	326.0	328.0	325.7
50°	287.4	288.7	287.7	288.4	287.4	287.4	287.1	286.8
52.5°	250.4	250.1	250.1	249.8	249.8	250.4	249.8	250.7
55°	213.4	213.7	213.1	212.7	212.4	213.4	212.4	211.8
57.5°	178.3	178.9	177.7	178.3	176.0	177.0	177.3	177.7
60°	145.8	144.8	144.8	143.5	143.5	144.5	143.2	143.2
62.5°	113.0	113.6	112.6	113.9	113.9	115.2	114.6	115.2
65°	86.6	86.9	87.2	87.2	87.2	89.2	88.5	87.5
67.5°	65.3	65.7	66.0	65.7	66.6	66.0	66.0	66.3
70°	47.3	47.6	48.0	48.0	47.6	48.0	48.0	48.0
72.5°	32.8	33.1	32.8	33.1	33.5	33.1	33.1	33.5
75°	21.6	21.6	21.2	21.2	21.2	21.2	21.6	21.2
77.5°	12.6	12.9	12.6	12.9	12.9	12.9	12.9	12.9
80°	7.4	7.4	7.4	7.1	7.4	7.4	7.4	7.1
82.5°	3.9	3.9	3.5	3.5	3.9	3.9	3.9	3.9
85°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
87.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
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)