

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: PORTFOLIO

Report Number: P252668

Luminaire Tested: **LE\_6B15D010 EC6B10209030 6LBDW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252668  
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: PORTFOLIO  
Catalog Number: LE\_6B15D010 EC6B10209030 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: 1461.3 lumens  
Efficiency: N/A  
Efficacy: 101.5 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

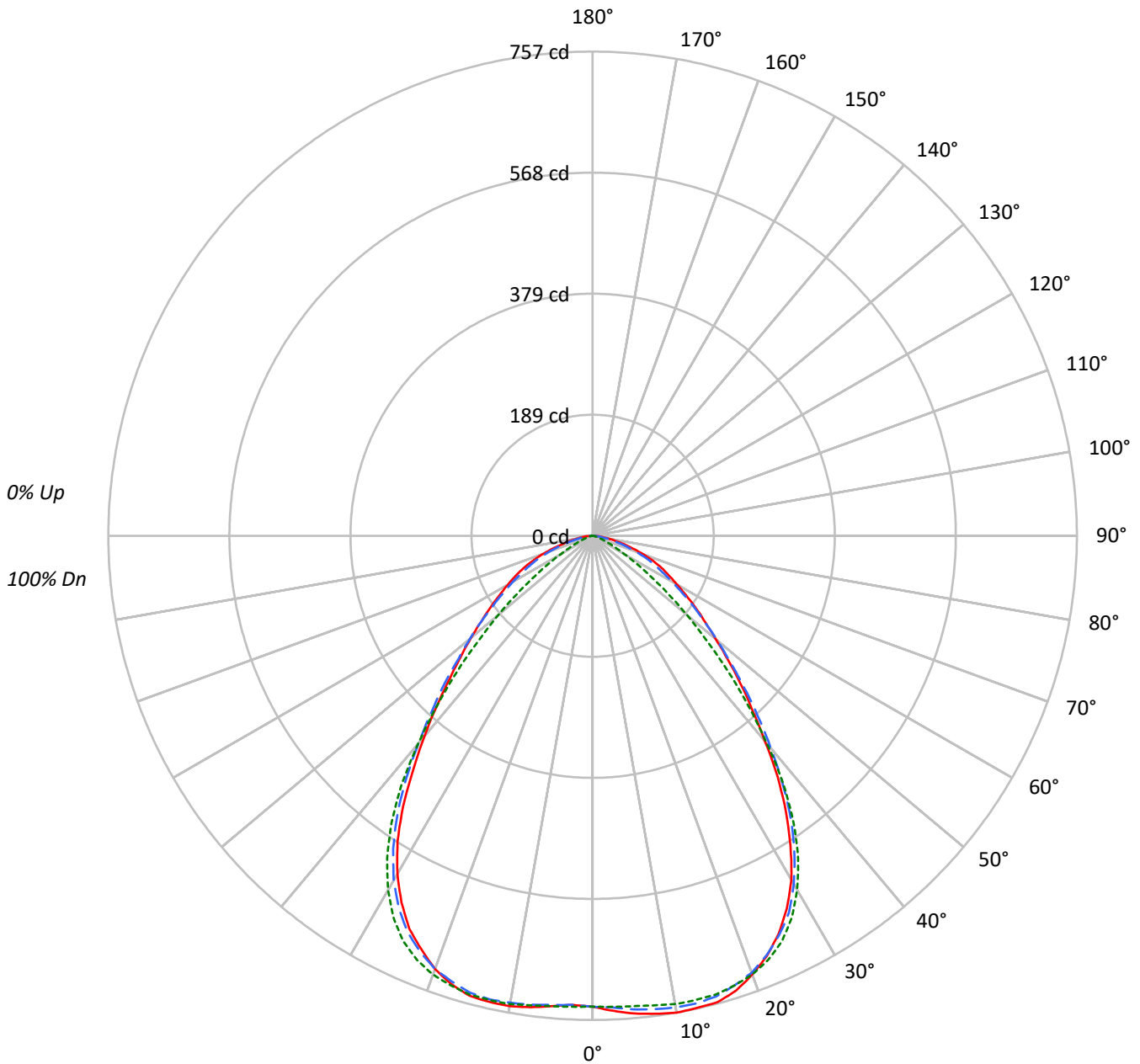
Input Watts (W): 14.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	48030	48030	48030
5°	49104	48345	48345
10°	50149	49255	49460
15°	50994	50150	50285
20°	50682	50682	50030
25°	49468	50375	48799
30°	46827	48168	45968
35°	41964	43629	41136
40°	35650	36102	34765
45°	30170	27578	29109
50°	25476	19447	25161
55°	22385	12557	22157
60°	19833	7464	19977
65°	18339	4492	18339
70°	15870	2575	15489
75°	12604	1563	11822
80°	9393	1165	9017
85°	8608	749	7785



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.9	4.9
10°-20°	209.8	14.4
20°-30°	315.5	21.6
30°-40°	331.7	22.7
40°-50°	247.8	17.0
50°-60°	154.3	10.6
60°-70°	87.7	6.0
70°-80°	36.1	2.5
80°-90°	7.5	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°	596.1	40.8
0°-40°	927.9	63.5
0°-60°	1329.9	91.0
0°-90°	1461.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1461.3	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	736	736	736	736	736	
5°	750	744	738	736	738	72
15°	755	746	742	739	744	212
25°	687	689	700	684	678	315
35°	527	540	548	532	516	327
45°	327	334	299	328	316	253
55°	197	193	110	190	195	177
65°	119	106	29	106	119	117
75°	50	40	6	38	47	54
85°	12	7	1	6	10	13
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°	736.2	736.2	736.2	736.2	736.2	736.2	736.2	736.2	736.2	736.2	736.2
2.5°	743.5	742.5	743.5	741.4	740.4	740.4	741.4	739.4	738.2	739.4	738.2
5°	749.8	747.6	748.8	747.6	745.6	745.6	746.6	743.5	743.5	744.5	743.5
7.5°	753.9	753.9	753.9	751.9	750.8	749.8	751.9	748.8	747.6	747.6	746.6
10°	757.0	756.0	757.0	755.0	752.9	751.9	753.9	751.9	749.8	751.9	748.8
12.5°	756.0	756.0	756.0	755.0	752.9	751.9	753.9	750.8	749.8	750.8	748.8
15°	755.0	751.9	752.9	751.9	748.8	748.8	749.8	746.6	744.5	747.6	745.6
17.5°	745.6	743.5	744.5	742.5	740.4	739.4	740.4	739.4	737.2	739.4	737.2
20°	730.0	730.0	731.0	728.9	726.9	725.8	727.9	725.8	723.8	726.9	726.9
22.5°	711.2	711.2	711.2	710.1	709.1	709.1	709.1	708.1	707.0	709.1	710.1
25°	687.2	686.2	687.2	688.2	687.2	686.2	687.2	687.2	685.1	689.4	689.4
27.5°	657.1	657.1	659.1	658.1	658.1	657.1	659.1	659.1	658.1	661.2	664.4
30°	621.6	619.6	621.6	621.6	622.8	622.8	623.8	623.8	623.8	626.9	629.0
32.5°	575.9	576.9	580.0	579.0	577.9	581.0	581.0	583.1	584.1	586.2	587.2
35°	526.9	528.0	528.0	529.0	531.1	529.0	534.2	533.1	534.2	538.4	540.5
37.5°	474.9	471.8	476.9	474.9	475.9	475.9	478.0	479.0	482.1	487.4	487.4
40°	418.6	419.6	421.8	422.8	423.9	423.9	423.9	427.0	428.0	434.2	433.1
42.5°	369.6	369.6	371.8	372.8	372.8	372.8	372.8	375.9	378.0	380.1	382.1
45°	327.0	323.9	325.9	325.9	328.0	327.0	329.0	331.1	332.1	335.2	334.2
47.5°	286.4	285.4	286.4	287.4	286.4	287.4	288.5	289.5	290.5	290.5	290.5
50°	251.0	251.0	252.0	253.0	253.0	253.0	253.0	254.1	254.1	256.1	254.1
52.5°	221.8	222.9	222.9	221.8	222.9	222.9	223.9	223.9	222.9	222.9	219.8
55°	196.8	195.8	196.8	195.8	196.8	196.8	195.8	195.8	194.8	193.6	192.6
57.5°	172.9	172.9	172.9	172.9	171.9	172.9	171.9	170.8	170.8	168.8	165.6
60°	152.0	152.0	152.0	152.0	152.0	151.0	152.0	151.0	148.9	146.9	142.6
62.5°	134.4	133.2	134.4	133.2	133.2	132.2	132.2	131.2	129.1	127.0	122.9
65°	118.8	119.8	118.8	118.8	117.6	116.6	116.6	115.6	112.5	110.4	106.2
67.5°	102.0	101.0	101.0	101.0	100.0	100.0	100.0	97.9	95.8	92.6	88.5
70°	83.2	83.2	83.2	82.2	82.2	81.2	81.2	80.1	78.1	76.0	70.8
72.5°	65.6	65.6	65.6	63.5	64.5	63.5	63.5	61.5	60.4	57.2	54.1
75°	50.0	50.0	49.0	49.0	47.9	46.9	46.9	45.9	44.8	42.8	39.6
77.5°	36.5	36.5	36.5	35.4	34.4	33.4	33.4	32.2	31.2	30.2	28.1
80°	25.0	25.0	25.0	25.0	24.0	22.9	22.9	21.9	21.9	20.9	18.8
82.5°	16.6	16.6	16.6	16.6	15.6	15.6	15.6	14.6	13.5	13.5	11.5
85°	11.5	11.5	10.4	10.4	10.4	10.4	9.4	9.4	8.4	7.2	7.2
87.5°	6.2	6.2	6.2	6.2	5.2	5.2	5.2	5.2	4.1	4.1	3.1
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):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	736.2	736.2	736.2	736.2	736.2	736.2	736.2	736.2	736.2	736.2	736.2
2.5°	741.4	741.4	740.4	737.2	738.2	737.2	738.2	737.2	734.1	737.2	734.1
5°	745.6	746.6	744.5	740.4	741.4	740.4	740.4	739.4	736.2	738.2	736.2
7.5°	749.8	748.8	747.6	743.5	744.5	743.5	743.5	741.4	738.2	740.4	737.2
10°	751.9	751.9	749.8	745.6	745.6	744.5	745.6	744.5	740.4	743.5	741.4
12.5°	751.9	750.8	750.8	745.6	746.6	745.6	746.6	744.5	741.4	743.5	742.5
15°	748.8	748.8	747.6	742.5	743.5	743.5	744.5	742.5	739.4	742.5	740.4
17.5°	742.5	742.5	741.4	737.2	739.4	739.4	740.4	738.2	735.1	737.2	737.2
20°	730.0	731.0	731.0	727.9	730.0	730.0	731.0	730.0	728.9	730.0	727.9
22.5°	715.4	717.5	717.5	714.4	716.4	716.4	719.5	718.5	716.4	717.5	716.4
25°	693.5	695.6	697.6	695.6	697.6	697.6	700.8	699.8	697.6	699.8	696.6
27.5°	668.5	669.6	671.6	669.6	672.8	671.6	674.8	673.8	670.6	673.8	672.8
30°	633.1	637.2	640.4	637.2	640.4	640.4	642.5	641.5	640.4	639.4	639.4
32.5°	593.5	597.8	597.8	596.6	598.8	598.8	599.8	597.8	596.6	597.8	598.8
35°	544.6	546.8	548.8	547.8	548.8	549.9	548.8	549.9	546.8	547.8	547.8
37.5°	491.5	493.6	493.6	490.5	492.5	492.5	490.5	490.5	488.4	490.5	486.2
40°	435.2	433.1	434.2	432.1	430.1	430.1	429.0	424.9	422.8	423.9	424.9
42.5°	380.1	380.1	377.0	371.8	366.5	366.5	363.4	361.4	357.1	359.2	358.2
45°	333.2	328.0	323.9	315.5	312.4	310.2	305.1	299.9	297.9	298.9	297.9
47.5°	288.5	284.2	273.9	262.4	259.2	256.1	249.9	243.6	241.6	239.5	239.5
50°	251.0	243.6	232.2	219.8	214.5	209.2	201.0	194.8	190.5	191.6	191.6
52.5°	216.6	208.2	194.8	179.1	172.9	166.6	159.4	152.0	148.9	147.9	147.9
55°	186.4	177.0	163.5	145.8	140.6	133.2	123.9	115.6	111.4	110.4	112.5
57.5°	159.4	151.0	135.4	117.6	111.4	104.1	94.8	87.5	82.2	81.2	82.2
60°	137.5	126.0	112.5	95.8	87.5	81.2	70.8	64.5	59.4	57.2	58.4
62.5°	115.6	105.1	91.6	75.0	68.8	62.5	53.1	45.9	41.6	40.6	41.6
65°	98.9	88.5	76.0	61.5	55.2	49.0	40.6	33.4	30.2	29.1	30.2
67.5°	82.2	72.9	62.5	49.0	43.8	38.5	30.2	25.0	20.9	19.8	20.9
70°	66.6	58.4	47.9	38.5	33.4	29.1	22.9	17.8	14.6	13.5	14.6
72.5°	50.0	43.8	36.5	28.1	25.0	21.9	16.6	12.5	10.4	9.4	10.4
75°	36.5	31.2	26.0	19.8	17.8	15.6	11.5	8.4	7.2	6.2	7.2
77.5°	25.0	21.9	17.8	13.5	11.5	10.4	7.2	6.2	5.2	4.1	4.1
80°	16.6	14.6	11.5	9.4	8.4	7.2	5.2	4.1	3.1	3.1	3.1
82.5°	10.4	8.4	7.2	5.2	4.1	4.1	3.1	2.1	2.1	2.1	2.1
85°	6.2	5.2	4.1	3.1	2.1	2.1	1.0	1.0	1.0	1.0	1.0
87.5°	3.1	2.1	2.1	1.0	1.0	1.0	1.0	1.0	0.0	0.0	1.0
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):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	736.2	736.2	736.2	736.2	736.2	736.2	736.2	736.2	736.2	736.2	736.2
2.5°	736.2	734.1	734.1	735.1	736.2	737.2	735.1	734.1	734.1	737.2	735.1
5°	736.2	735.1	735.1	735.1	737.2	738.2	736.2	735.1	736.2	739.4	738.2
7.5°	739.4	737.2	738.2	738.2	739.4	741.4	739.4	738.2	739.4	742.5	740.4
10°	741.4	739.4	740.4	739.4	742.5	743.5	741.4	740.4	741.4	745.6	744.5
12.5°	742.5	741.4	741.4	740.4	743.5	744.5	742.5	741.4	742.5	745.6	744.5
15°	740.4	739.4	739.4	739.4	741.4	743.5	740.4	739.4	739.4	742.5	741.4
17.5°	736.2	734.1	734.1	734.1	735.1	736.2	733.1	732.0	731.0	734.1	733.1
20°	728.9	726.9	724.8	724.8	725.8	725.8	723.8	720.6	720.6	721.6	719.5
22.5°	715.4	714.4	712.2	711.2	713.2	712.2	708.1	705.0	703.9	705.0	702.9
25°	696.6	694.5	693.5	692.5	693.5	692.5	688.2	684.1	684.1	684.1	681.0
27.5°	670.6	668.5	667.5	667.5	668.5	666.5	662.2	658.1	656.0	656.0	652.9
30°	637.2	637.2	636.2	635.2	634.1	634.1	627.9	623.8	621.6	622.8	620.6
32.5°	596.6	595.6	594.6	591.5	592.5	591.5	586.2	583.1	580.0	577.9	576.9
35°	544.6	544.6	543.6	543.6	543.6	542.5	537.4	534.2	532.1	531.1	528.0
37.5°	487.4	486.2	485.2	485.2	485.2	485.2	482.1	479.0	479.0	478.0	475.9
40°	422.8	423.9	424.9	423.9	427.0	430.1	425.9	423.9	422.8	425.9	421.8
42.5°	360.2	359.2	364.5	365.5	365.5	370.8	371.8	372.8	371.8	373.9	373.9
45°	299.9	298.9	304.1	306.1	311.4	317.6	320.8	325.9	328.0	330.1	328.0
47.5°	242.6	246.8	251.0	256.1	260.4	270.8	277.0	282.2	284.2	287.4	287.4
50°	194.8	198.9	206.1	210.4	215.5	228.0	238.5	245.8	249.9	253.0	252.0
52.5°	150.0	157.2	166.6	170.8	178.1	192.6	204.1	212.4	217.6	220.8	221.8
55°	115.6	121.9	131.2	137.5	144.8	160.4	175.0	184.4	189.5	193.6	195.8
57.5°	85.4	92.6	103.1	108.2	116.6	134.4	146.9	158.2	164.5	169.8	170.8
60°	62.5	69.8	79.1	85.4	93.8	111.4	126.0	136.4	143.8	147.9	150.0
62.5°	44.8	52.1	61.5	67.6	75.0	90.6	105.1	115.6	122.9	128.1	131.2
65°	32.2	39.6	49.0	54.1	60.4	75.0	88.5	98.9	106.2	112.5	114.5
67.5°	24.0	29.1	37.5	42.8	49.0	60.4	71.9	81.2	88.5	93.8	95.8
70°	17.8	21.9	29.1	32.2	36.5	46.9	56.2	64.5	70.8	75.0	77.0
72.5°	12.5	15.6	20.9	24.0	27.1	35.4	42.8	49.0	53.1	57.2	59.4
75°	8.4	10.4	14.6	16.6	18.8	25.0	30.2	35.4	38.5	41.6	42.8
77.5°	5.2	7.2	10.4	11.5	13.5	16.6	20.9	24.0	26.0	28.1	30.2
80°	3.1	4.1	6.2	7.2	8.4	11.5	13.5	15.6	17.8	19.8	20.9
82.5°	2.1	3.1	4.1	4.1	5.2	6.2	8.4	10.4	11.5	12.5	13.5
85°	1.0	1.0	2.1	2.1	3.1	3.1	4.1	5.2	6.2	7.2	8.4
87.5°	1.0	1.0	1.0	1.0	2.1	2.1	3.1	3.1	3.1	4.1	4.1
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):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	736.2	736.2	736.2	736.2	736.2	736.2	736.2	736.2
2.5°	733.1	736.2	733.1	735.1	734.1	734.1	733.1	734.1
5°	736.2	740.4	736.2	739.4	737.2	737.2	737.2	738.2
7.5°	739.4	743.5	740.4	743.5	742.5	741.4	741.4	743.5
10°	742.5	745.6	743.5	746.6	745.6	744.5	744.5	746.6
12.5°	742.5	746.6	744.5	747.6	746.6	745.6	745.6	746.6
15°	739.4	744.5	741.4	744.5	743.5	742.5	742.5	744.5
17.5°	730.0	734.1	732.0	734.1	734.1	733.1	734.1	735.1
20°	717.5	720.6	718.5	720.6	720.6	718.5	719.5	720.6
22.5°	699.8	702.9	700.8	702.9	701.9	700.8	700.8	699.8
25°	677.9	682.0	678.9	681.0	678.9	676.9	676.9	677.9
27.5°	650.9	654.0	649.8	651.9	649.8	647.8	647.8	646.6
30°	615.4	616.5	613.4	615.4	613.4	612.2	610.2	610.2
32.5°	572.8	573.8	570.6	570.6	568.5	568.5	564.4	567.5
35°	522.8	523.8	522.8	521.8	518.6	517.5	516.5	516.5
37.5°	470.6	470.6	467.5	466.5	464.4	462.4	463.4	460.2
40°	417.6	416.5	413.4	414.5	413.4	410.2	409.2	408.2
42.5°	367.6	367.6	364.5	365.5	363.4	362.4	359.2	360.2
45°	323.9	323.9	320.8	320.8	319.6	316.5	317.6	315.5
47.5°	284.2	284.2	283.2	283.2	280.1	279.1	279.1	279.1
50°	249.9	249.9	249.9	249.9	248.9	247.9	246.8	247.9
52.5°	220.8	222.9	221.8	221.8	220.8	219.8	218.6	218.6
55°	194.8	195.8	195.8	196.8	195.8	194.8	195.8	194.8
57.5°	171.9	173.9	173.9	173.9	173.9	173.9	172.9	171.9
60°	152.0	153.1	153.1	154.1	154.1	154.1	153.1	153.1
62.5°	132.2	134.4	135.4	135.4	136.4	135.4	135.4	135.4
65°	116.6	118.8	119.8	118.8	119.8	119.8	118.8	118.8
67.5°	97.9	100.0	100.0	100.0	100.0	101.0	100.0	100.0
70°	79.1	81.2	80.1	81.2	81.2	81.2	81.2	81.2
72.5°	60.4	61.5	62.5	62.5	63.5	62.5	62.5	62.5
75°	43.8	45.9	45.9	45.9	45.9	46.9	46.9	46.9
77.5°	31.2	32.2	32.2	33.4	33.4	33.4	33.4	34.4
80°	21.9	21.9	22.9	22.9	24.0	24.0	24.0	24.0
82.5°	14.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6
85°	8.4	9.4	9.4	9.4	9.4	10.4	10.4	10.4
87.5°	5.2	5.2	5.2	5.2	5.2	5.2	4.1	4.1
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)