

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: P252253

Luminaire Tested: **LE_6B15D010 EC6B10209035 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252253
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-7)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B15D010 EC6B10209035 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1467.5 lumens
Efficiency: N/A
Efficacy: 101.9 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.18 / 1.16
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

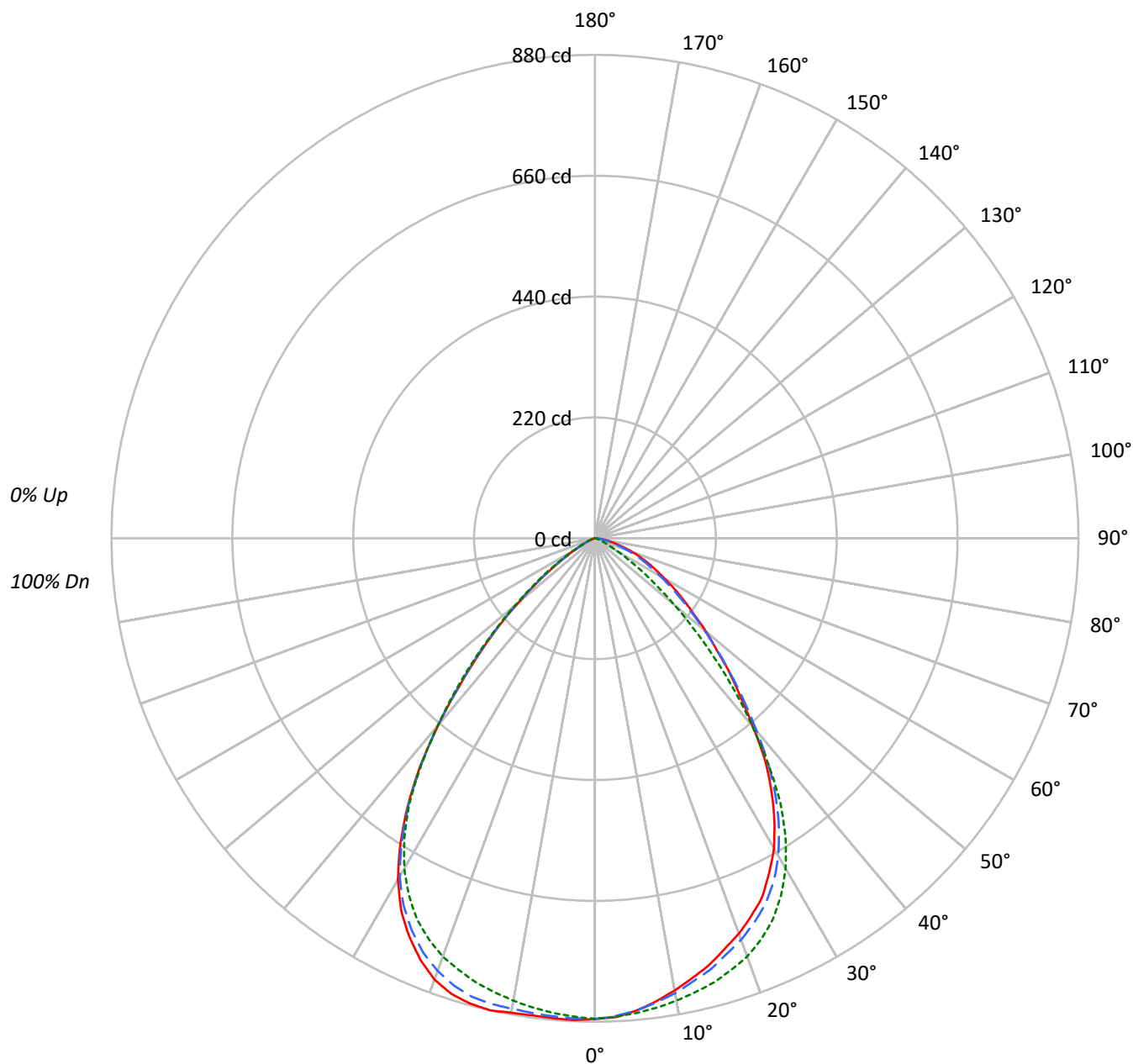
Input Watts (W): 14.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	0			
RCR																								
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100						
1	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90						
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	85	82	80						
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72						
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64						
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58						
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52						
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47						
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43						
9	65	54	47	42	64	53	46	42	52	46	42	51	46	41	50	45	41	40						
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	37						

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	57073	57073	57073
5°	56524	56806	57428
10°	55356	56615	58092
15°	54304	56519	59228
20°	53175	56250	59333
25°	51865	55133	57574
30°	49110	52289	54044
35°	44593	46863	47293
40°	38061	37882	37694
45°	31970	28362	27485
50°	26694	19193	18229
55°	22464	11772	10692
60°	19024	6198	5376
65°	16487	3257	2609
70°	13715	2022	1412
75°	10108	1311	781
80°	7927	789	376
85°	6363	749	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.4	5.6
10°-20°	236.0	16.1
20°-30°	348.5	23.8
30°-40°	359.2	24.5
40°-50°	248.1	16.9
50°-60°	122.3	8.3
60°-70°	49.6	3.4
70°-80°	17.6	1.2
80°-90°	3.6	0.2
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°	667.0	45.5
0°-40°	1026.2	69.9
0°-60°	1396.6	95.2
0°-90°	1467.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1467.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	875	875	875	875	875	
5°	863	863	867	874	877	82
15°	804	812	837	864	877	226
25°	720	734	766	788	800	329
35°	560	574	588	592	594	347
45°	346	349	307	303	298	268
55°	198	190	104	97	94	178
65°	107	96	21	17	17	106
75°	40	34	5	3	3	45
85°	8	6	1	0	0	10
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°	874.8	874.8	874.8	874.8	874.8	874.8	874.8	874.8	874.8	874.8	874.8
2.5°	872.6	869.5	871.5	867.4	872.6	867.4	868.4	869.5	868.4	869.5	870.5
5°	863.1	859.9	863.1	857.9	863.1	859.9	859.9	861.0	861.0	862.0	863.1
7.5°	850.4	847.2	850.4	845.1	851.5	848.2	848.2	850.4	849.4	850.4	852.5
10°	835.6	831.4	834.6	831.4	837.8	833.5	835.6	835.6	835.6	838.8	840.9
12.5°	819.8	815.5	819.8	814.5	820.9	817.6	818.8	821.9	823.0	825.1	826.1
15°	804.0	798.6	800.8	797.6	804.0	800.8	801.9	806.0	806.0	809.2	812.4
17.5°	783.9	779.6	783.9	779.6	784.9	782.8	784.9	788.1	788.1	791.2	794.4
20°	765.9	761.6	764.9	761.6	768.0	764.9	765.9	770.1	771.2	774.4	777.5
22.5°	743.8	740.5	742.6	739.5	745.9	743.8	744.8	749.0	750.0	752.1	757.5
25°	720.5	714.1	717.4	715.2	721.5	718.4	720.5	724.8	726.9	730.0	734.2
27.5°	686.6	683.5	685.6	685.6	690.9	687.8	688.8	693.0	696.1	699.4	704.6
30°	651.9	646.5	648.6	649.8	653.9	651.9	653.9	658.1	659.2	663.4	667.6
32.5°	607.5	605.4	609.5	607.5	609.5	609.5	610.6	613.8	615.9	618.0	623.2
35°	559.9	555.6	559.9	557.8	563.1	559.9	563.1	566.2	566.2	570.5	573.6
37.5°	508.1	502.9	505.0	505.0	507.1	506.0	506.0	511.2	512.4	515.5	518.8
40°	446.9	444.8	449.0	447.9	449.0	449.0	450.0	453.2	455.4	456.4	457.4
42.5°	391.9	393.0	394.0	394.0	394.0	394.0	394.0	398.2	397.2	400.4	401.5
45°	346.5	342.2	344.4	343.4	346.5	343.4	346.5	349.6	347.6	350.8	348.6
47.5°	300.0	300.0	300.0	299.0	301.1	300.0	302.1	303.2	303.2	303.2	302.1
50°	263.0	259.9	260.9	260.9	262.0	260.9	263.0	264.1	264.1	262.0	257.8
52.5°	227.1	226.1	226.1	228.2	228.2	227.1	227.1	227.1	227.1	224.0	221.9
55°	197.5	195.5	196.5	196.5	196.5	196.5	197.5	196.5	196.5	193.4	190.1
57.5°	171.1	169.0	169.0	169.0	170.1	169.0	169.0	169.0	168.0	164.8	160.6
60°	145.8	144.8	145.8	145.8	146.9	145.8	145.8	145.8	143.6	140.5	136.2
62.5°	124.6	124.6	124.6	125.8	125.8	124.6	124.6	123.6	122.5	118.4	114.1
65°	106.8	105.6	106.8	106.8	107.8	107.8	106.8	105.6	104.6	100.4	96.1
67.5°	88.8	87.6	88.8	88.8	89.8	88.8	88.8	88.8	85.6	83.5	79.2
70°	71.9	70.8	70.8	70.8	71.9	69.8	70.8	70.8	68.6	65.5	61.2
72.5°	54.9	54.9	54.9	54.9	54.9	54.9	53.9	53.9	51.8	48.6	46.5
75°	40.1	40.1	41.2	41.2	40.1	40.1	40.1	39.1	38.0	35.9	33.8
77.5°	29.6	29.6	29.6	29.6	28.5	28.5	28.5	27.5	26.4	25.4	23.2
80°	21.1	21.1	21.1	20.1	21.1	20.1	20.1	20.1	18.0	16.9	15.9
82.5°	14.8	13.8	13.8	13.8	13.8	13.8	13.8	12.6	12.6	11.6	10.6
85°	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	7.4	6.4	6.4
87.5°	4.2	5.2	5.2	5.2	5.2	5.2	5.2	4.2	4.2	4.2	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°	874.8	874.8	874.8	874.8	874.8	874.8	874.8	874.8	874.8	874.8	874.8
2.5°	870.5	870.5	872.6	869.5	874.8	871.5	870.5	875.8	872.6	871.5	873.6
5°	863.1	864.1	865.2	863.1	868.4	865.2	865.2	870.5	868.4	867.4	870.5
7.5°	853.6	854.6	856.8	855.8	859.9	857.9	858.9	864.1	862.0	862.0	865.2
10°	842.0	844.1	846.2	846.2	851.5	849.4	849.4	855.8	853.6	854.6	858.9
12.5°	828.2	831.4	834.6	835.6	840.9	837.8	838.8	846.2	845.1	846.2	850.4
15°	813.5	817.6	820.9	820.9	827.1	824.0	827.1	834.6	832.5	836.8	842.0
17.5°	796.5	800.8	805.0	806.0	812.4	810.2	814.5	821.9	821.9	824.0	830.4
20°	780.8	786.0	788.1	791.2	797.6	796.5	798.6	807.1	807.1	810.2	816.6
22.5°	759.6	764.9	769.1	772.2	777.5	777.5	780.8	788.1	788.1	790.2	796.5
25°	736.4	742.6	745.9	749.0	754.2	753.2	756.4	762.8	763.8	765.9	772.2
27.5°	706.8	712.0	716.2	718.4	725.8	721.5	724.8	732.1	731.0	733.1	738.5
30°	669.8	675.0	679.2	679.2	685.6	685.6	688.8	692.0	692.0	694.1	698.2
32.5°	626.5	632.8	632.8	636.0	640.2	636.0	640.2	644.4	642.2	645.5	648.6
35°	576.8	580.0	581.0	581.0	584.2	583.1	582.1	585.2	583.1	588.4	591.6
37.5°	516.6	520.9	518.8	520.9	519.8	516.6	516.6	521.9	517.6	518.8	521.9
40°	458.5	458.5	457.4	452.1	453.2	450.0	449.0	450.0	445.8	444.8	449.0
42.5°	398.2	397.2	394.0	386.6	387.8	382.4	378.2	378.2	376.1	375.0	376.1
45°	344.4	341.2	336.0	327.5	325.4	321.1	312.8	310.6	307.4	307.4	308.5
47.5°	294.8	290.5	282.1	272.5	267.2	262.0	253.5	250.4	245.1	243.0	245.1
50°	253.5	246.1	235.6	221.9	216.6	210.2	201.8	196.5	191.2	189.1	188.0
52.5°	215.5	205.0	194.4	177.5	173.2	166.9	155.2	150.0	144.8	140.5	140.5
55°	182.8	173.2	158.5	142.6	136.2	130.0	118.4	110.9	105.6	103.5	101.4
57.5°	153.1	142.6	128.9	112.0	105.6	99.2	87.6	80.2	75.0	71.9	69.8
60°	128.9	117.2	103.5	88.8	81.4	75.0	63.4	56.0	50.8	47.5	45.4
62.5°	105.6	96.1	82.4	68.6	62.4	56.0	46.5	39.1	33.8	31.8	28.5
65°	88.8	79.2	66.5	54.9	49.6	43.4	34.9	28.5	24.2	21.1	19.0
67.5°	71.9	64.5	53.9	43.4	38.0	33.8	26.4	21.1	16.9	14.8	13.8
70°	57.0	49.6	41.2	32.8	29.6	25.4	20.1	14.8	12.6	10.6	9.5
72.5°	42.2	37.0	30.6	24.2	21.1	19.0	13.8	11.6	8.5	7.4	6.4
75°	30.6	26.4	22.1	16.9	14.8	13.8	10.6	7.4	6.4	5.2	4.2
77.5°	21.1	19.0	14.8	11.6	10.6	9.5	7.4	5.2	4.2	3.1	3.1
80°	13.8	11.6	9.5	7.4	7.4	6.4	4.2	3.1	3.1	2.1	2.1
82.5°	8.5	7.4	6.4	5.2	4.2	4.2	3.1	2.1	2.1	1.0	1.0
85°	5.2	4.2	3.1	3.1	2.1	2.1	2.1	1.0	1.0	1.0	1.0
87.5°	2.1	2.1	2.1	1.0	1.0	1.0	1.0	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	874.8	874.8	874.8	874.8	874.8	874.8	874.8	874.8	874.8	874.8	874.8
2.5°	873.6	873.6	875.8	872.6	874.8	874.8	876.9	872.6	874.8	875.8	877.9
5°	869.5	870.5	872.6	871.5	872.6	872.6	874.8	869.5	873.6	873.6	876.9
7.5°	865.2	865.2	867.4	866.2	868.4	869.5	871.5	867.4	871.5	871.5	874.8
10°	859.9	859.9	863.1	862.0	865.2	866.2	869.5	865.2	869.5	870.5	873.6
12.5°	852.5	853.6	856.8	856.8	859.9	862.0	865.2	863.1	868.4	869.5	873.6
15°	844.1	846.2	850.4	849.4	852.5	855.8	859.9	856.8	864.1	866.2	870.5
17.5°	833.5	835.6	838.8	838.8	842.0	844.1	849.4	847.2	853.6	854.6	859.9
20°	817.6	820.9	825.1	824.0	827.1	829.2	833.5	831.4	837.8	839.9	845.1
22.5°	798.6	800.8	804.0	804.0	807.1	809.2	813.5	810.2	816.6	817.6	821.9
25°	773.2	775.4	777.5	778.6	781.8	782.8	784.9	782.8	788.1	789.1	794.4
27.5°	740.5	741.6	744.8	744.8	746.9	748.0	751.1	746.9	754.2	754.2	757.5
30°	701.5	700.4	704.6	702.5	704.6	704.6	707.8	705.8	711.0	708.9	712.0
32.5°	649.8	651.9	651.9	649.8	653.9	652.9	652.9	650.8	653.9	655.0	657.1
35°	589.5	592.6	592.6	593.8	594.8	591.6	592.6	586.4	591.6	592.6	593.8
37.5°	524.0	520.9	522.9	519.8	525.0	518.8	518.8	514.5	518.8	518.8	519.8
40°	449.0	447.9	450.0	447.9	446.9	445.8	443.8	440.5	444.8	442.6	445.8
42.5°	378.2	377.1	377.1	375.0	374.0	374.0	371.9	369.8	368.8	368.8	374.0
45°	305.2	307.4	305.2	304.2	306.4	304.2	305.2	301.1	303.2	301.1	303.2
47.5°	244.0	245.1	243.0	240.9	244.0	240.9	240.9	237.8	241.9	241.9	239.8
50°	189.1	188.0	185.9	188.0	187.0	187.0	187.0	183.9	185.9	182.8	184.9
52.5°	139.5	138.4	138.4	137.4	138.4	137.4	137.4	136.2	136.2	135.2	136.2
55°	101.4	100.4	98.2	98.2	98.2	99.2	98.2	97.2	97.2	96.1	97.2
57.5°	68.6	66.5	66.5	66.5	66.5	65.5	65.5	64.5	65.5	64.5	65.5
60°	44.4	44.4	42.2	42.2	42.2	42.2	42.2	41.2	42.2	42.2	42.2
62.5°	27.5	27.5	26.4	25.4	26.4	25.4	25.4	25.4	26.4	25.4	26.4
65°	18.0	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9
67.5°	12.6	11.6	11.6	11.6	11.6	11.6	11.6	10.6	11.6	11.6	11.6
70°	8.5	8.5	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
72.5°	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
75°	4.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
77.5°	3.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
80°	2.1	2.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
82.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
85°	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	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):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	874.8	874.8	874.8	874.8	874.8	874.8	874.8	874.8
2.5°	874.8	875.8	873.6	874.8	872.6	874.8	875.8	877.9
5°	872.6	873.6	871.5	873.6	871.5	873.6	874.8	876.9
7.5°	870.5	872.6	870.5	872.6	870.5	872.6	873.6	875.8
10°	870.5	873.6	871.5	874.8	871.5	873.6	875.8	876.9
12.5°	870.5	873.6	872.6	874.8	873.6	875.8	877.9	880.0
15°	868.4	871.5	869.5	872.6	871.5	872.6	876.9	876.9
17.5°	856.8	859.9	859.9	862.0	862.0	865.2	867.4	869.5
20°	842.0	845.1	844.1	847.2	847.2	850.4	852.5	854.6
22.5°	819.8	824.0	823.0	826.1	825.1	827.1	831.4	830.4
25°	791.2	796.5	795.5	797.6	796.5	796.5	798.6	799.8
27.5°	756.4	759.6	758.5	760.6	758.5	760.6	762.8	763.8
30°	711.0	713.1	712.0	713.1	712.0	714.1	715.2	717.4
32.5°	656.0	659.2	656.0	658.1	657.1	657.1	661.4	659.2
35°	590.5	591.6	592.6	592.6	590.5	591.6	593.8	593.8
37.5°	517.6	522.9	516.6	519.8	518.8	518.8	518.8	521.9
40°	441.6	442.6	440.5	440.5	440.5	439.5	443.8	442.6
42.5°	369.8	370.8	369.8	366.6	367.6	367.6	370.8	366.6
45°	300.0	302.1	301.1	301.1	299.0	299.0	300.0	297.9
47.5°	237.8	239.8	236.6	237.8	235.6	237.8	236.6	238.8
50°	180.6	182.8	181.8	182.8	182.8	180.6	183.9	179.6
52.5°	135.2	136.2	135.2	134.1	133.1	133.1	135.2	134.1
55°	96.1	95.1	95.1	95.1	96.1	96.1	95.1	94.0
57.5°	64.5	64.5	63.4	63.4	64.5	62.4	63.4	62.4
60°	41.2	41.2	41.2	41.2	40.1	41.2	41.2	41.2
62.5°	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4
65°	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9
67.5°	10.6	11.6	11.6	11.6	10.6	10.6	10.6	10.6
70°	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
72.5°	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
75°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
77.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
82.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0
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)