

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: P252685

Luminaire Tested: **LE_6B20D010 EC6B10209727 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252685
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_6B20D010 EC6B10209727 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 97CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1698.8 lumens
Efficiency: N/A
Efficacy: 81.7 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

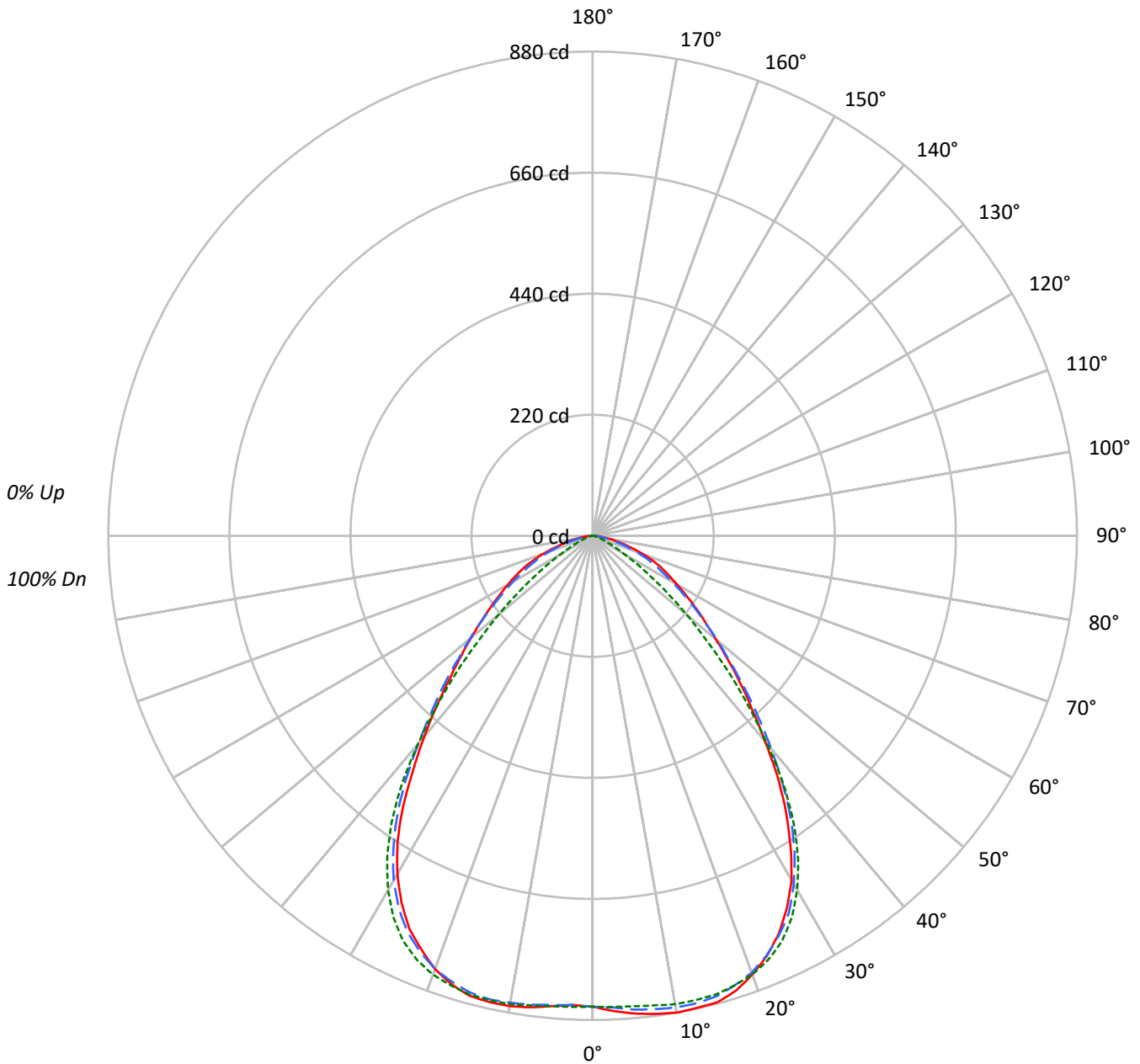
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	55839	55839	55839
5°	57081	56203	56203
10°	58304	57264	57502
15°	59275	58296	58458
20°	58916	58916	58166
25°	57516	58560	56731
30°	54451	55988	53442
35°	48782	50717	47826
40°	41442	41970	40411
45°	35070	32053	33843
50°	29617	22613	29241
55°	26025	14605	25752
60°	23069	8690	23226
65°	21303	5233	21303
70°	18484	3014	18007
75°	14645	1815	13738
80°	10895	1353	10482
85°	10031	898	9057



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.4	4.9
10°-20°	243.9	14.4
20°-30°	366.8	21.6
30°-40°	385.6	22.7
40°-50°	288.1	17.0
50°-60°	179.3	10.6
60°-70°	102.0	6.0
70°-80°	42.0	2.5
80°-90°	8.7	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°	693.0	40.8
0°-40°	1078.7	63.5
0°-60°	1546.1	91.0
0°-90°	1698.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1698.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	856	856	856	856	856	
5°	872	864	858	856	858	83
15°	878	867	863	860	866	247
25°	799	801	814	795	788	366
35°	612	628	637	619	600	380
45°	380	389	347	381	367	295
55°	229	224	128	220	226	206
65°	138	124	34	124	138	136
75°	58	46	7	45	54	63
85°	13	8	1	7	12	15
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°	855.9	855.9	855.9	855.9	855.9	855.9	855.9	855.9	855.9	855.9	855.9
2.5°	864.4	863.1	864.4	861.9	860.8	860.8	861.9	859.5	858.2	859.5	858.2
5°	871.6	869.1	870.4	869.1	866.8	866.8	868.0	864.4	864.4	865.5	864.4
7.5°	876.5	876.5	876.5	874.0	872.9	871.6	874.0	870.4	869.1	869.1	868.0
10°	880.1	878.9	880.1	877.6	875.2	874.0	876.5	874.0	871.6	874.0	870.4
12.5°	878.9	878.9	878.9	877.6	875.2	874.0	876.5	872.9	871.6	872.9	870.4
15°	877.6	874.0	875.2	874.0	870.4	870.4	871.6	868.0	865.5	869.1	866.8
17.5°	866.8	864.4	865.5	863.1	860.8	859.5	860.8	859.5	857.1	859.5	857.1
20°	848.6	848.6	849.9	847.4	845.0	843.8	846.1	843.8	841.4	845.0	845.0
22.5°	826.9	826.9	826.9	825.6	824.4	824.4	824.4	823.1	822.0	824.4	825.6
25°	799.0	797.8	799.0	800.1	799.0	797.8	799.0	799.0	796.5	801.4	801.4
27.5°	763.9	763.9	766.2	765.1	765.1	763.9	766.2	766.2	765.1	768.8	772.4
30°	722.8	720.2	722.8	722.8	723.9	723.9	725.1	725.1	725.1	728.8	731.1
32.5°	669.5	670.6	674.2	673.1	671.9	675.5	675.5	677.9	679.1	681.5	682.8
35°	612.5	613.8	613.8	615.0	617.4	615.0	621.0	619.8	621.0	625.9	628.2
37.5°	552.0	548.4	554.4	552.0	553.2	553.2	555.6	556.9	560.5	566.5	566.5
40°	486.6	487.9	490.2	491.5	492.8	492.8	492.8	496.4	497.5	504.8	503.6
42.5°	429.8	429.8	432.1	433.4	433.4	433.4	433.4	437.0	439.4	441.9	444.2
45°	380.1	376.5	378.9	378.9	381.4	380.1	382.5	385.0	386.1	389.8	388.6
47.5°	332.9	331.8	332.9	334.1	332.9	334.1	335.4	336.5	337.8	337.8	337.8
50°	291.8	291.8	293.0	294.1	294.1	294.1	294.1	295.4	295.4	297.8	295.4
52.5°	257.9	259.0	259.0	257.9	259.0	259.0	260.2	260.2	259.0	259.0	255.4
55°	228.8	227.6	228.8	227.6	228.8	228.8	227.6	227.6	226.4	225.1	224.0
57.5°	201.0	201.0	201.0	201.0	199.8	201.0	199.8	198.5	198.5	196.1	192.5
60°	176.8	176.8	176.8	176.8	176.8	175.5	176.8	175.5	173.1	170.8	165.9
62.5°	156.1	155.0	156.1	155.0	155.0	153.8	153.8	152.5	150.1	147.8	142.9
65°	138.0	139.2	138.0	138.0	136.8	135.6	135.6	134.4	130.8	128.4	123.5
67.5°	118.6	117.4	117.4	117.4	116.2	116.2	116.2	113.8	111.4	107.8	102.9
70°	96.9	96.9	96.9	95.6	95.6	94.4	94.4	93.2	90.8	88.4	82.4
72.5°	76.2	76.2	76.2	73.9	75.0	73.9	73.9	71.4	70.2	66.6	63.0
75°	58.1	58.1	56.9	56.9	55.6	54.5	54.5	53.2	52.0	49.6	46.0
77.5°	42.4	42.4	42.4	41.1	40.0	38.8	38.8	37.5	36.4	35.1	32.6
80°	29.0	29.0	29.0	29.0	27.9	26.6	26.6	25.4	25.4	24.2	21.8
82.5°	19.4	19.4	19.4	19.4	18.1	18.1	18.1	17.0	15.8	15.8	13.4
85°	13.4	13.4	12.1	12.1	12.1	12.1	10.9	10.9	9.6	8.5	8.5
87.5°	7.2	7.2	7.2	7.2	6.0	6.0	6.0	6.0	4.9	4.9	3.6
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°	855.9	855.9	855.9	855.9	855.9	855.9	855.9	855.9	855.9	855.9	855.9
2.5°	861.9	861.9	860.8	857.1	858.2	857.1	858.2	857.1	853.5	857.1	853.5
5°	866.8	868.0	865.5	860.8	861.9	860.8	860.8	859.5	855.9	858.2	855.9
7.5°	871.6	870.4	869.1	864.4	865.5	864.4	864.4	861.9	858.2	860.8	857.1
10°	874.0	874.0	871.6	866.8	866.8	865.5	866.8	865.5	860.8	864.4	861.9
12.5°	874.0	872.9	872.9	866.8	868.0	866.8	868.0	865.5	861.9	864.4	863.1
15°	870.4	870.4	869.1	863.1	864.4	864.4	865.5	863.1	859.5	863.1	860.8
17.5°	863.1	863.1	861.9	857.1	859.5	859.5	860.8	858.2	854.6	857.1	857.1
20°	848.6	849.9	849.9	846.1	848.6	848.6	849.9	848.6	847.4	848.6	846.1
22.5°	831.6	834.1	834.1	830.5	832.9	832.9	836.5	835.2	832.9	834.1	832.9
25°	806.2	808.6	811.1	808.6	811.1	811.1	814.8	813.5	811.1	813.5	809.9
27.5°	777.1	778.4	780.8	778.4	782.0	780.8	784.5	783.2	779.6	783.2	782.0
30°	736.0	740.9	744.5	740.9	744.5	744.5	746.9	745.8	744.5	743.2	743.2
32.5°	690.0	694.9	694.9	693.6	696.1	696.1	697.2	694.9	693.6	694.9	696.1
35°	633.1	635.5	638.0	636.8	638.0	639.1	638.0	639.1	635.5	636.8	636.8
37.5°	571.4	573.8	573.8	570.1	572.6	572.6	570.1	570.1	567.8	570.1	565.4
40°	506.0	503.6	504.8	502.4	500.0	500.0	498.8	493.9	491.5	492.8	493.9
42.5°	441.9	441.9	438.2	432.1	426.1	426.1	422.5	420.1	415.2	417.6	416.4
45°	387.4	381.4	376.5	366.8	363.1	360.8	354.8	348.6	346.2	347.4	346.2
47.5°	335.4	330.5	318.4	305.0	301.4	297.8	290.5	283.2	280.9	278.4	278.4
50°	291.8	283.2	270.0	255.4	249.4	243.4	233.6	226.4	221.5	222.8	222.8
52.5°	251.8	242.1	226.4	208.2	201.0	193.8	185.2	176.8	173.1	171.9	171.9
55°	216.8	205.8	190.0	169.5	163.4	155.0	144.0	134.4	129.5	128.4	130.8
57.5°	185.2	175.5	157.4	136.8	129.5	121.0	110.1	101.6	95.6	94.4	95.6
60°	159.8	146.5	130.8	111.4	101.6	94.4	82.4	75.0	69.0	66.6	67.8
62.5°	134.4	122.2	106.5	87.1	79.9	72.6	61.8	53.2	48.4	47.2	48.4
65°	115.0	102.9	88.4	71.4	64.1	56.9	47.2	38.8	35.1	33.9	35.1
67.5°	95.6	84.8	72.6	56.9	50.9	44.8	35.1	29.0	24.2	23.0	24.2
70°	77.5	67.8	55.6	44.8	38.8	33.9	26.6	20.6	17.0	15.8	17.0
72.5°	58.1	50.9	42.4	32.6	29.0	25.4	19.4	14.5	12.1	10.9	12.1
75°	42.4	36.4	30.2	23.0	20.6	18.1	13.4	9.6	8.5	7.2	8.5
77.5°	29.0	25.4	20.6	15.8	13.4	12.1	8.5	7.2	6.0	4.9	4.9
80°	19.4	17.0	13.4	10.9	9.6	8.5	6.0	4.9	3.6	3.6	3.6
82.5°	12.1	9.6	8.5	6.0	4.9	4.9	3.6	2.4	2.4	2.4	2.4
85°	7.2	6.0	4.9	3.6	2.4	2.4	1.2	1.2	1.2	1.2	1.2
87.5°	3.6	2.4	2.4	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	855.9	855.9	855.9	855.9	855.9	855.9	855.9	855.9	855.9	855.9	855.9
2.5°	855.9	853.5	853.5	854.6	855.9	857.1	854.6	853.5	853.5	857.1	854.6
5°	855.9	854.6	854.6	854.6	857.1	858.2	855.9	854.6	855.9	859.5	858.2
7.5°	859.5	857.1	858.2	858.2	859.5	861.9	859.5	858.2	859.5	863.1	860.8
10°	861.9	859.5	860.8	859.5	863.1	864.4	861.9	860.8	861.9	866.8	865.5
12.5°	863.1	861.9	861.9	860.8	864.4	865.5	863.1	861.9	863.1	866.8	865.5
15°	860.8	859.5	859.5	859.5	861.9	864.4	860.8	859.5	859.5	863.1	861.9
17.5°	855.9	853.5	853.5	853.5	854.6	855.9	852.2	851.0	849.9	853.5	852.2
20°	847.4	845.0	842.5	842.5	843.8	843.8	841.4	837.8	837.8	838.9	836.5
22.5°	831.6	830.5	828.0	826.9	829.2	828.0	823.1	819.5	818.4	819.5	817.1
25°	809.9	807.5	806.2	805.0	806.2	805.0	800.1	795.4	795.4	795.4	791.8
27.5°	779.6	777.1	776.0	776.0	777.1	774.8	769.9	765.1	762.6	762.6	759.0
30°	740.9	740.9	739.6	738.5	737.2	737.2	730.0	725.1	722.8	723.9	721.5
32.5°	693.6	692.5	691.2	687.6	688.8	687.6	681.5	677.9	674.2	671.9	670.6
35°	633.1	633.1	631.9	631.9	631.9	630.8	624.6	621.0	618.6	617.4	613.8
37.5°	566.5	565.4	564.1	564.1	564.1	564.1	560.5	556.9	556.9	555.6	553.2
40°	491.5	492.8	493.9	492.8	496.4	500.0	495.1	492.8	491.5	495.1	490.2
42.5°	418.9	417.6	423.8	424.9	424.9	431.0	432.1	433.4	432.1	434.6	434.6
45°	348.6	347.4	353.5	355.9	362.0	369.2	372.9	378.9	381.4	383.8	381.4
47.5°	282.0	286.9	291.8	297.8	302.6	314.8	322.0	328.0	330.5	334.1	334.1
50°	226.4	231.2	239.8	244.5	250.6	265.1	277.2	285.8	290.5	294.1	293.0
52.5°	174.4	182.8	193.8	198.5	207.0	224.0	237.2	247.0	253.0	256.6	257.9
55°	134.4	141.6	152.5	159.8	168.2	186.4	203.4	214.2	220.4	225.1	227.6
57.5°	99.2	107.8	119.9	125.9	135.6	156.1	170.8	184.0	191.2	197.4	198.5
60°	72.6	81.1	92.0	99.2	109.0	129.5	146.5	158.6	167.0	171.9	174.4
62.5°	52.0	60.5	71.4	78.6	87.1	105.4	122.2	134.4	142.9	148.9	152.5
65°	37.5	46.0	56.9	63.0	70.2	87.1	102.9	115.0	123.5	130.8	133.1
67.5°	27.9	33.9	43.6	49.6	56.9	70.2	83.5	94.4	102.9	109.0	111.4
70°	20.6	25.4	33.9	37.5	42.4	54.5	65.4	75.0	82.4	87.1	89.6
72.5°	14.5	18.1	24.2	27.9	31.5	41.1	49.6	56.9	61.8	66.6	69.0
75°	9.6	12.1	17.0	19.4	21.8	29.0	35.1	41.1	44.8	48.4	49.6
77.5°	6.0	8.5	12.1	13.4	15.8	19.4	24.2	27.9	30.2	32.6	35.1
80°	3.6	4.9	7.2	8.5	9.6	13.4	15.8	18.1	20.6	23.0	24.2
82.5°	2.4	3.6	4.9	4.9	6.0	7.2	9.6	12.1	13.4	14.5	15.8
85°	1.2	1.2	2.4	2.4	3.6	3.6	4.9	6.0	7.2	8.5	9.6
87.5°	1.2	1.2	1.2	1.2	2.4	2.4	3.6	3.6	3.6	4.9	4.9
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: P252685

CATALOG NUMBER: LE_6B20D010 EC6B10209727 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	855.9	855.9	855.9	855.9	855.9	855.9	855.9	855.9
2.5°	852.2	855.9	852.2	854.6	853.5	853.5	852.2	853.5
5°	855.9	860.8	855.9	859.5	857.1	857.1	857.1	858.2
7.5°	859.5	864.4	860.8	864.4	863.1	861.9	861.9	864.4
10°	863.1	866.8	864.4	868.0	866.8	865.5	865.5	868.0
12.5°	863.1	868.0	865.5	869.1	868.0	866.8	866.8	868.0
15°	859.5	865.5	861.9	865.5	864.4	863.1	863.1	865.5
17.5°	848.6	853.5	851.0	853.5	853.5	852.2	853.5	854.6
20°	834.1	837.8	835.2	837.8	837.8	835.2	836.5	837.8
22.5°	813.5	817.1	814.8	817.1	815.9	814.8	814.8	813.5
25°	788.1	792.9	789.2	791.8	789.2	786.9	786.9	788.1
27.5°	756.6	760.2	755.4	757.8	755.4	753.0	753.0	751.8
30°	715.5	716.6	713.0	715.5	713.0	711.8	709.4	709.4
32.5°	665.8	667.0	663.4	663.4	661.0	661.0	656.1	659.8
35°	607.8	608.9	607.8	606.5	602.9	601.6	600.5	600.5
37.5°	547.1	547.1	543.5	542.4	539.9	537.5	538.8	535.1
40°	485.4	484.2	480.6	481.8	480.6	477.0	475.8	474.5
42.5°	427.4	427.4	423.8	424.9	422.5	421.2	417.6	418.9
45°	376.5	376.5	372.9	372.9	371.6	368.0	369.2	366.8
47.5°	330.5	330.5	329.2	329.2	325.6	324.4	324.4	324.4
50°	290.5	290.5	290.5	290.5	289.4	288.1	286.9	288.1
52.5°	256.6	259.0	257.9	257.9	256.6	255.4	254.2	254.2
55°	226.4	227.6	227.6	228.8	227.6	226.4	227.6	226.4
57.5°	199.8	202.1	202.1	202.1	202.1	202.1	201.0	199.8
60°	176.8	178.0	178.0	179.1	179.1	179.1	178.0	178.0
62.5°	153.8	156.1	157.4	157.4	158.6	157.4	157.4	157.4
65°	135.6	138.0	139.2	138.0	139.2	139.2	138.0	138.0
67.5°	113.8	116.2	116.2	116.2	116.2	117.4	116.2	116.2
70°	92.0	94.4	93.2	94.4	94.4	94.4	94.4	94.4
72.5°	70.2	71.4	72.6	72.6	73.9	72.6	72.6	72.6
75°	50.9	53.2	53.2	53.2	53.2	54.5	54.5	54.5
77.5°	36.4	37.5	37.5	38.8	38.8	38.8	38.8	40.0
80°	25.4	25.4	26.6	26.6	27.9	27.9	27.9	27.9
82.5°	17.0	18.1	18.1	18.1	18.1	18.1	18.1	18.1
85°	9.6	10.9	10.9	10.9	10.9	12.1	12.1	12.1
87.5°	6.0	6.0	6.0	6.0	6.0	6.0	4.9	4.9
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)