

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: P252478

Luminaire Tested: **LE_6B20D010 EC6B10209730 6LBLWW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252478
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-6)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B20D010 EC6B10209730 6LBLWW1H
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 97CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1615.0 lumens
Efficiency: N/A
Efficacy: 77.6 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1.02 / 1.12
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

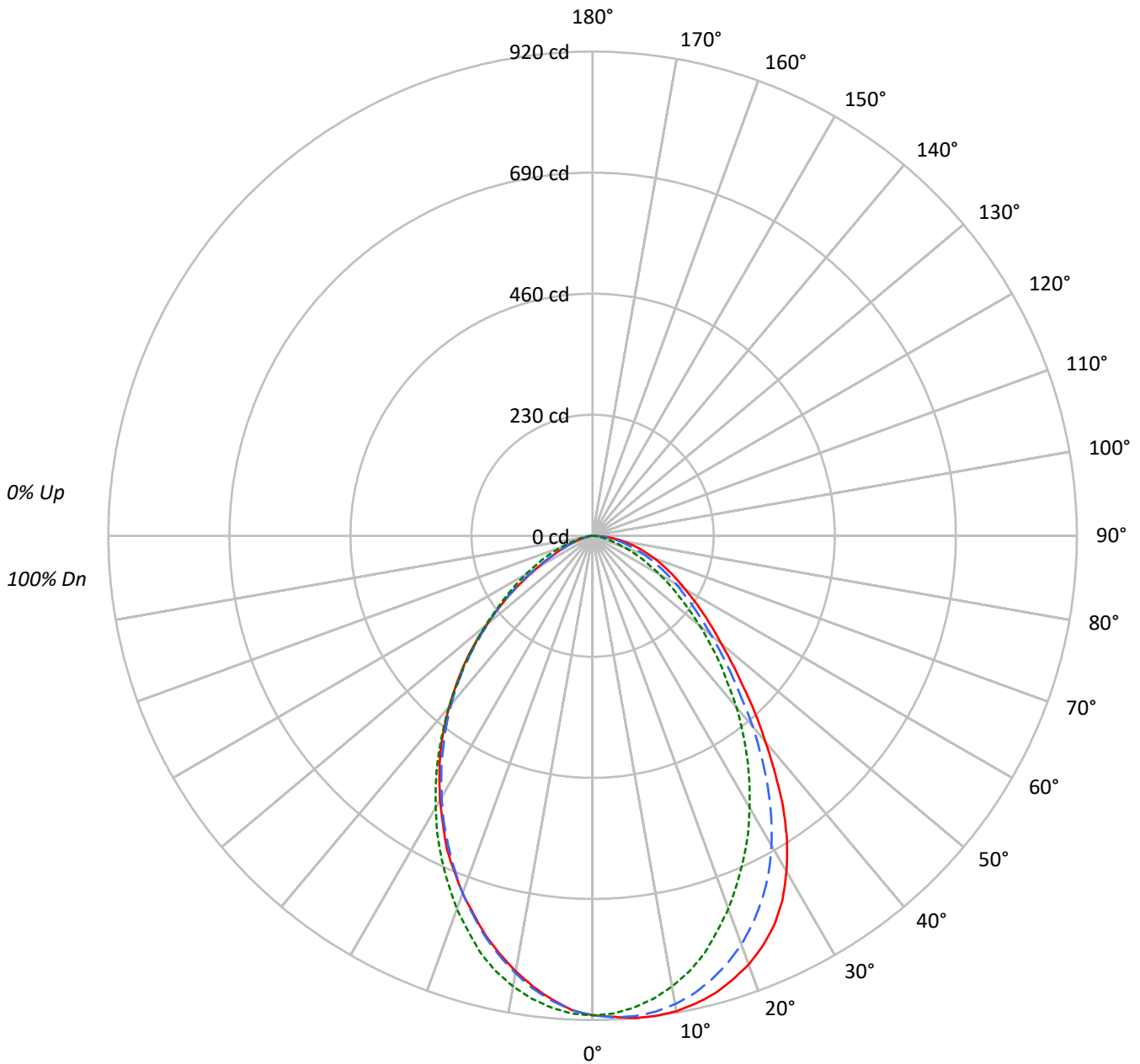
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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			100
1	111	107	103	100	108	105	101	99	100	98	96	97	95	93	93	91	90	88			88
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77			77
3	95	86	79	73	93	84	78	73	81	76	71	79	74	70	76	72	69	67			67
4	88	78	70	64	86	76	69	64	74	68	63	72	66	62	70	65	61	59			59
5	82	70	62	57	80	69	62	56	67	61	56	65	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	45	43			43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39			39
9	63	50	43	38	61	50	43	38	49	42	37	48	42	37	47	41	37	35			35
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33			33

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	59441	59441	59441
5°	60251	58928	57926
10°	60775	57595	55661
15°	60774	55466	53081
20°	60180	52362	50161
25°	58754	48820	47186
30°	55483	44899	43656
35°	50295	40714	40212
40°	43434	36204	36102
45°	37238	31517	31757
50°	32367	26978	26592
55°	29073	22737	21293
60°	26422	19155	15684
65°	24823	15823	11516
70°	23653	12303	8431
75°	22661	8923	5747
80°	21415	6199	3795
85°	18864	3743	1871



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.2	5.3
10°-20°	233.4	14.5
20°-30°	324.1	20.1
30°-40°	335.6	20.8
40°-50°	275.8	17.1
50°-60°	189.6	11.7
60°-70°	109.0	6.7
70°-80°	50.1	3.1
80°-90°	12.2	0.8
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°	642.7	39.8
0°-40°	978.3	60.6
0°-60°	1443.7	89.4
0°-90°	1615.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1615.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	911	911	911	911	911	
5°	920	916	900	887	884	88
15°	900	873	821	788	786	253
25°	816	762	678	649	656	373
35°	632	580	511	496	505	392
45°	404	373	342	338	344	314
55°	256	232	200	188	187	230
65°	161	140	102	72	75	160
75°	90	71	35	23	23	95
85°	25	18	5	2	2	28
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°	911.1	911.1	911.1	911.1	911.1	911.1	911.1	911.1	911.1	911.1	911.1
2.5°	914.9	922.5	917.4	916.1	918.8	918.8	918.8	914.9	917.4	913.6	916.1
5°	920.0	926.2	921.2	918.8	921.2	922.5	918.8	916.1	920.0	914.9	916.1
7.5°	920.0	926.2	921.2	920.0	921.2	921.2	920.0	914.9	917.4	912.4	912.4
10°	917.4	922.5	917.4	914.9	916.1	914.9	914.9	908.6	909.9	903.5	903.5
12.5°	909.9	916.1	909.9	907.2	907.2	907.2	903.5	898.5	899.8	892.1	890.9
15°	899.8	904.8	898.5	895.9	895.9	894.6	892.1	884.5	884.5	876.9	873.1
17.5°	884.5	889.6	884.5	880.8	879.5	876.9	874.4	866.8	864.2	855.4	851.6
20°	866.8	870.6	865.5	861.8	859.2	856.6	851.6	844.0	841.5	832.6	826.4
22.5°	844.0	849.1	841.5	837.8	835.1	831.4	826.4	818.8	814.9	803.5	796.0
25°	816.2	818.8	812.4	808.6	803.5	801.0	797.2	787.1	783.2	770.6	761.8
27.5°	780.8	783.2	775.8	773.1	766.9	764.2	759.2	750.4	745.4	732.6	723.9
30°	736.5	739.0	734.0	730.1	725.1	720.0	716.2	707.4	699.8	687.1	679.5
32.5°	687.1	690.9	685.9	680.8	671.9	673.2	666.9	658.0	651.8	640.2	631.5
35°	631.5	634.0	627.6	626.4	621.4	616.2	609.9	603.6	599.8	587.1	579.5
37.5°	569.4	575.8	569.4	564.4	561.9	558.0	554.2	545.4	542.9	535.2	525.1
40°	510.0	513.8	510.0	504.9	501.1	501.1	496.0	491.0	484.6	477.0	473.2
42.5°	456.9	454.2	453.0	450.5	445.4	444.1	442.9	436.6	432.8	425.1	418.9
45°	403.6	404.9	402.4	401.1	397.4	394.8	392.2	387.2	386.0	378.4	373.2
47.5°	359.4	358.1	355.6	355.6	353.0	350.5	348.0	344.2	342.9	336.6	331.5
50°	318.9	320.1	318.9	317.6	313.9	312.5	310.0	307.5	305.0	298.6	293.6
52.5°	286.0	284.8	283.5	283.5	279.6	278.4	275.9	273.4	270.8	264.5	260.6
55°	255.6	255.6	254.4	253.1	249.2	248.0	246.8	244.2	240.4	235.4	231.6
57.5°	227.8	227.8	226.5	225.2	222.8	222.8	220.1	217.6	215.1	210.0	205.0
60°	202.5	203.8	202.5	201.2	198.6	198.6	197.4	193.6	192.4	186.0	182.2
62.5°	181.0	181.0	181.0	179.8	178.4	175.9	175.9	172.1	169.6	165.8	160.8
65°	160.8	160.8	160.8	159.5	156.9	155.6	154.4	151.9	149.4	145.5	140.5
67.5°	141.8	141.8	141.8	140.5	137.9	136.6	135.4	134.1	130.4	126.5	121.5
70°	124.0	124.0	122.8	121.5	120.2	119.0	117.6	115.1	112.6	107.5	103.8
72.5°	106.2	106.2	106.2	103.8	102.5	102.5	100.0	98.8	96.1	91.1	87.4
75°	89.9	88.6	88.6	87.4	86.0	84.8	83.5	82.2	78.5	75.9	70.9
77.5°	73.4	73.4	72.1	70.9	70.9	69.6	68.4	65.8	64.5	60.8	57.0
80°	57.0	57.0	57.0	57.0	55.6	54.4	54.4	51.9	50.6	46.9	44.2
82.5°	43.0	41.8	41.8	41.8	40.5	39.2	39.2	38.0	36.8	34.1	31.6
85°	25.2	24.0	24.0	24.0	22.8	22.8	21.5	21.5	20.2	17.8	17.8
87.5°	7.6	7.6	8.9	8.9	7.6	7.6	7.6	7.6	7.6	6.4	6.4
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°	911.1	911.1	911.1	911.1	911.1	911.1	911.1	911.1	911.1	911.1	911.1
2.5°	913.6	917.4	912.4	911.1	916.1	913.6	912.4	909.9	911.1	908.6	904.8
5°	912.4	917.4	911.1	907.2	913.6	909.9	907.2	904.8	904.8	899.8	897.1
7.5°	908.6	911.1	904.8	901.0	904.8	901.0	898.5	894.6	893.4	887.0	883.2
10°	898.5	901.0	893.4	888.4	892.1	887.0	883.2	879.5	876.9	869.4	864.2
12.5°	884.5	885.8	876.9	870.6	873.1	869.4	863.0	858.0	855.4	847.9	841.5
15°	865.5	866.8	856.6	847.9	850.4	845.2	837.8	832.6	828.9	821.2	812.4
17.5°	842.8	841.5	830.1	821.2	822.5	816.2	808.6	801.0	796.0	787.1	780.8
20°	817.5	813.6	801.0	790.9	792.1	784.5	775.8	768.1	761.8	754.2	745.4
22.5°	785.9	780.8	769.4	756.8	758.0	751.6	739.0	732.6	726.4	716.2	708.6
25°	751.6	744.1	732.6	720.0	720.0	712.4	702.2	694.8	688.4	678.2	669.4
27.5°	711.1	707.4	692.1	682.0	680.8	673.2	664.4	655.5	647.9	639.0	630.1
30°	666.9	660.5	649.1	637.8	635.2	628.9	620.0	609.9	604.9	596.0	588.4
32.5°	620.0	613.8	601.1	589.6	588.4	583.4	575.8	565.6	560.6	554.2	549.2
35°	566.9	564.4	551.8	542.9	542.9	537.8	530.2	521.4	517.5	511.2	504.9
37.5°	516.2	512.5	501.1	493.5	493.5	487.1	479.6	475.8	472.0	467.0	463.1
40°	463.1	460.6	451.8	444.1	445.4	440.4	435.2	430.2	427.8	425.1	421.4
42.5°	413.8	411.2	404.9	398.6	398.6	394.8	389.8	386.0	383.4	379.6	378.4
45°	369.5	365.8	360.6	354.4	354.4	350.5	348.0	345.5	344.2	341.6	337.9
47.5°	326.5	324.0	318.9	312.5	312.5	312.5	307.5	303.8	303.8	301.1	299.9
50°	289.8	286.0	282.2	277.1	277.1	274.6	270.8	267.0	267.0	265.8	263.2
52.5°	255.6	253.1	248.0	243.0	243.0	240.4	236.6	235.4	234.1	230.2	229.0
55°	226.5	224.0	220.1	213.9	212.6	211.4	207.5	205.0	203.8	199.9	199.9
57.5°	199.9	197.4	191.1	187.2	186.0	183.5	179.8	177.1	175.9	173.4	170.9
60°	177.1	173.4	168.2	163.2	162.0	159.5	155.6	153.1	151.9	146.8	144.2
62.5°	155.6	151.9	146.8	141.8	140.5	137.9	132.9	130.4	127.8	122.8	120.2
65°	135.4	131.6	126.5	121.5	119.0	117.6	112.6	108.9	106.2	102.5	97.4
67.5°	116.4	112.6	107.5	101.2	101.2	97.4	93.6	89.9	86.0	82.2	78.5
70°	98.8	94.9	89.9	84.8	83.5	81.0	77.2	72.1	69.6	64.5	60.8
72.5°	82.2	78.5	73.4	68.4	67.1	64.5	60.8	55.6	51.9	48.1	44.2
75°	67.1	63.2	58.2	54.4	53.1	50.6	46.9	41.8	38.0	35.4	31.6
77.5°	53.1	49.4	45.5	41.8	40.5	38.0	34.1	31.6	27.9	25.2	21.5
80°	40.5	38.0	34.1	31.6	30.4	27.9	25.2	21.5	19.0	16.5	15.1
82.5°	29.1	26.6	24.0	20.2	20.2	17.8	16.5	13.9	11.4	10.1	8.9
85°	16.5	13.9	12.6	11.4	10.1	10.1	8.9	7.6	6.4	5.0	5.0
87.5°	5.0	5.0	3.8	3.8	3.8	3.8	2.5	2.5	2.5	2.5	2.5
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°	911.1	911.1	911.1	911.1	911.1	911.1	911.1	911.1	911.1	911.1	911.1
2.5°	904.8	906.0	903.5	906.0	903.5	904.8	902.2	904.8	902.2	904.8	899.8
5°	895.9	895.9	892.1	894.6	892.1	893.4	888.4	889.6	887.0	889.6	884.5
7.5°	880.8	882.0	875.6	878.2	874.4	874.4	870.6	871.9	868.1	869.4	865.5
10°	863.0	861.8	855.4	858.0	852.9	852.9	849.1	849.1	844.0	845.2	840.2
12.5°	837.8	836.5	828.9	831.4	826.4	826.4	822.5	822.5	817.5	820.0	814.9
15°	808.6	807.4	799.8	801.0	796.0	796.0	790.9	792.1	788.4	790.9	785.9
17.5°	775.8	774.4	766.9	768.1	761.8	763.0	759.2	758.0	755.5	756.8	752.9
20°	741.5	739.0	731.4	732.6	730.1	726.4	723.9	725.1	722.5	725.1	721.2
22.5°	706.1	701.0	694.8	694.8	692.1	692.1	688.4	690.9	685.9	689.6	687.1
25°	665.6	661.8	656.8	659.2	654.2	654.2	650.4	651.8	649.1	651.8	649.1
27.5°	626.4	623.9	616.2	618.8	615.0	616.2	612.5	613.8	612.5	615.0	612.5
30°	584.6	583.4	578.2	578.2	577.0	575.8	574.5	574.5	573.2	577.0	574.5
32.5°	545.4	541.6	536.5	540.4	534.0	537.8	535.2	537.8	535.2	537.8	536.5
35°	504.9	503.6	497.2	498.6	497.2	497.2	496.0	496.0	496.0	499.9	499.9
37.5°	461.9	460.6	456.9	458.1	455.5	454.2	454.2	456.9	456.9	459.4	459.4
40°	420.1	421.4	417.6	417.6	416.4	416.4	416.4	418.9	417.6	420.1	418.9
42.5°	378.4	378.4	374.6	375.9	374.6	375.9	375.9	378.4	378.4	379.6	378.4
45°	339.1	339.1	337.9	339.1	336.6	337.9	336.6	339.1	337.9	339.1	339.1
47.5°	299.9	299.9	299.9	298.6	298.6	298.6	298.6	298.6	297.4	299.9	298.6
50°	263.2	264.5	263.2	263.2	262.0	263.2	262.0	262.0	259.4	260.6	260.6
52.5°	230.2	230.2	227.8	227.8	227.8	226.5	226.5	226.5	225.2	225.2	222.8
55°	198.6	198.6	196.1	196.1	194.9	193.6	192.4	192.4	188.5	188.5	184.8
57.5°	169.6	168.2	164.5	164.5	162.0	160.8	159.5	158.1	155.6	153.1	151.9
60°	143.0	140.5	137.9	136.6	134.1	131.6	129.1	126.5	124.0	122.8	121.5
62.5°	117.6	113.9	111.4	110.1	107.5	103.8	101.2	98.8	96.1	94.9	92.4
65°	94.9	91.1	87.4	86.0	83.5	81.0	77.2	74.6	72.1	70.9	70.9
67.5°	74.6	70.9	65.8	65.8	63.2	60.8	58.2	55.6	54.4	55.6	55.6
70°	55.6	53.1	49.4	48.1	45.5	43.0	41.8	41.8	41.8	43.0	41.8
72.5°	41.8	38.0	35.4	34.1	32.9	31.6	31.6	31.6	30.4	31.6	31.6
75°	29.1	26.6	24.0	24.0	22.8	22.8	22.8	22.8	22.8	22.8	22.8
77.5°	20.2	17.8	16.5	16.5	16.5	15.1	15.1	15.1	15.1	15.1	15.1
80°	12.6	12.6	11.4	11.4	10.1	10.1	10.1	10.1	10.1	10.1	10.1
82.5°	7.6	7.6	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
85°	3.8	3.8	3.8	3.8	3.8	2.5	2.5	2.5	2.5	2.5	2.5
87.5°	1.2	1.2	1.2	1.2	1.2	2.5	2.5	2.5	2.5	2.5	2.5
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°	911.1	911.1	911.1	911.1	911.1	911.1	911.1	911.1
2.5°	899.8	903.5	898.5	902.2	901.0	899.8	897.1	902.2
5°	884.5	885.8	880.8	885.8	884.5	882.0	879.5	884.5
7.5°	863.0	866.8	860.5	865.5	864.2	861.8	859.2	864.2
10°	839.0	842.8	837.8	841.5	841.5	839.0	835.1	840.2
12.5°	812.4	814.9	809.9	814.9	813.6	811.1	809.9	813.6
15°	783.2	787.1	782.0	785.9	784.5	783.2	782.0	785.9
17.5°	751.6	755.5	751.6	755.5	755.5	751.6	750.4	752.9
20°	720.0	722.5	718.8	722.5	721.2	721.2	718.8	722.5
22.5°	684.6	688.4	685.9	688.4	687.1	687.1	685.9	688.4
25°	649.1	653.0	649.1	653.0	651.8	651.8	649.1	655.5
27.5°	613.8	616.2	612.5	617.5	616.2	613.8	615.0	616.2
30°	575.8	578.2	575.8	579.5	579.5	579.5	577.0	579.5
32.5°	537.8	541.6	537.8	541.6	540.4	540.4	539.1	541.6
35°	499.9	501.1	498.6	502.4	502.4	503.6	501.1	504.9
37.5°	460.6	461.9	460.6	461.9	464.4	460.6	463.1	464.4
40°	420.1	422.6	421.4	422.6	422.6	423.9	422.6	423.9
42.5°	379.6	382.1	379.6	383.4	382.1	382.1	383.4	383.4
45°	337.9	341.6	339.1	341.6	342.9	341.6	341.6	344.2
47.5°	298.6	301.1	299.9	301.1	301.1	301.1	301.1	303.8
50°	259.4	260.6	260.6	262.0	262.0	263.2	260.6	262.0
52.5°	220.1	222.8	222.8	222.8	221.5	222.8	222.8	222.8
55°	184.8	186.0	183.5	186.0	186.0	184.8	184.8	187.2
57.5°	150.6	150.6	150.6	150.6	150.6	149.4	150.6	150.6
60°	119.0	120.2	119.0	119.0	119.0	119.0	117.6	120.2
62.5°	92.4	92.4	91.1	92.4	92.4	92.4	93.6	93.6
65°	72.1	73.4	72.1	73.4	73.4	73.4	73.4	74.6
67.5°	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0
70°	43.0	43.0	43.0	44.2	43.0	43.0	43.0	44.2
72.5°	31.6	31.6	31.6	31.6	31.6	31.6	32.9	32.9
75°	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8
77.5°	15.1	15.1	15.1	16.5	15.1	16.5	15.1	15.1
80°	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
82.5°	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
85°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
87.5°	2.5	2.5	2.5	2.5	1.2	1.2	1.2	1.2
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)