

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: P252133

Luminaire Tested: **LE_6B10D010 EC6B10209024 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252133
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-1)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B10D010 EC6B10209024 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1221.3 lumens
Efficiency: N/A
Efficacy: 122.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

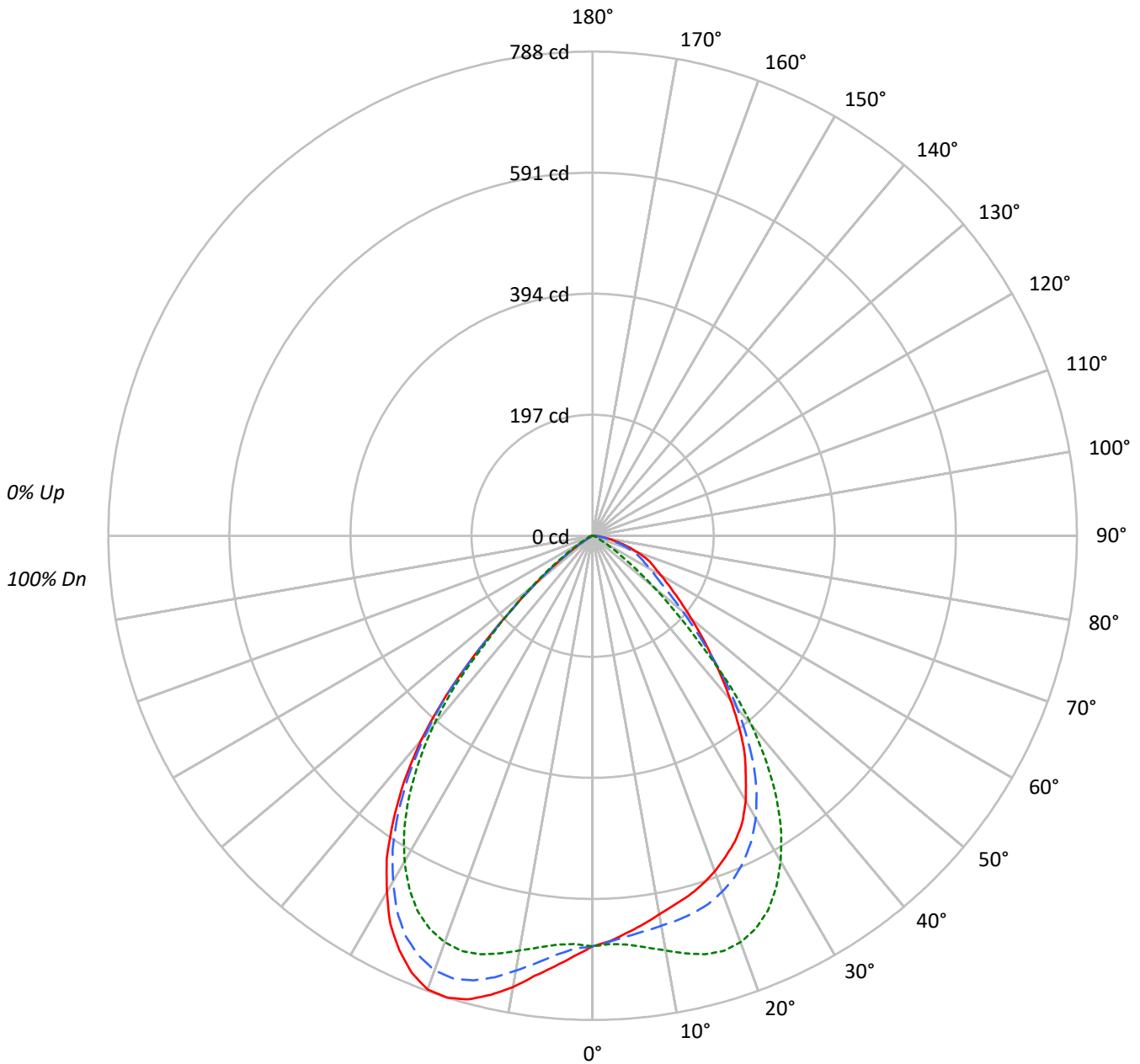
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90					90			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80					80			
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72					72			
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65					65			
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58					58			
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53					53			
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	50	48					48			
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44					44			
9	66	54	47	42	64	54	47	42	53	46	42	52	46	42	51	45	42	40					40			
10	62	50	43	39	61	50	43	39	49	43	39	48	43	39	47	42	38	37					37			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	43587	43587	43587
5°	42464	43754	46052
10°	41431	45406	49420
15°	40937	47624	52757
20°	40351	48870	54542
25°	39491	48511	53564
30°	37531	46096	50428
35°	34335	41566	45015
40°	29706	34322	36945
45°	25050	22512	24164
50°	21263	13032	12261
55°	18449	6245	4720
60°	16676	2923	1174
65°	16178	1683	386
70°	14497	1335	362
75°	11898	983	151
80°	8867	451	0
85°	7635	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.5	5.3
10°-20°	196.7	16.1
20°-30°	300.5	24.6
30°-40°	314.3	25.7
40°-50°	203.9	16.7
50°-60°	81.0	6.6
60°-70°	38.4	3.1
70°-80°	18.3	1.5
80°-90°	3.7	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°	561.7	46.0
0°-40°	876.0	71.7
0°-60°	1160.9	95.1
0°-90°	1221.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1221.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	668	668	668	668	668	
5°	648	654	668	685	703	61
15°	606	636	705	749	781	171
25°	549	583	674	719	744	251
35°	431	457	522	552	565	267
45°	272	269	244	259	262	211
55°	162	138	55	43	42	147
65°	105	87	11	2	2	102
75°	47	38	4	1	1	51
85°	10	6	0	0	0	12
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°	668.1	668.1	668.1	668.1	668.1	668.1	668.1	668.1	668.1	668.1	668.1
2.5°	659.9	661.1	654.1	652.1	657.2	659.1	659.9	657.9	658.5	661.1	661.1
5°	648.4	649.6	643.2	641.2	646.4	647.6	649.6	649.0	650.9	654.8	654.1
7.5°	637.5	639.4	632.4	629.8	636.1	639.4	640.6	640.6	643.2	648.4	649.0
10°	625.4	627.9	621.5	620.2	627.2	630.4	631.1	632.4	636.1	643.2	644.5
12.5°	615.1	617.6	613.2	611.2	618.9	622.1	623.4	626.0	630.4	639.4	640.6
15°	606.1	608.1	603.0	601.8	609.4	613.2	613.9	617.6	623.4	633.6	635.5
17.5°	594.6	596.0	592.1	590.9	598.5	602.4	603.0	607.5	614.5	624.6	627.9
20°	581.2	582.5	578.8	577.4	585.1	589.5	590.2	594.0	602.4	613.2	616.4
22.5°	565.2	567.9	563.4	562.1	569.8	573.6	575.5	578.8	587.0	597.9	602.4
25°	548.6	548.6	545.5	544.9	551.9	556.4	555.8	560.1	568.5	579.4	583.1
27.5°	527.0	526.4	523.1	522.5	530.1	534.0	532.8	537.1	544.9	555.8	559.5
30°	498.2	499.5	495.0	493.8	500.1	506.5	505.9	510.4	518.0	528.2	530.8
32.5°	463.8	465.0	464.4	462.5	468.2	471.4	473.2	476.5	482.9	493.8	496.2
35°	431.1	429.2	426.6	426.6	432.4	437.5	435.6	439.5	445.9	456.8	457.4
37.5°	390.9	390.2	389.0	387.8	394.1	395.4	396.0	398.6	404.4	413.2	412.0
40°	348.8	349.4	348.8	346.2	350.0	355.1	354.5	355.8	360.9	367.2	365.4
42.5°	309.1	309.1	309.1	306.6	311.1	313.6	314.9	314.2	315.5	321.2	318.8
45°	271.5	272.1	271.5	270.9	271.5	272.8	271.5	270.9	270.9	272.8	268.9
47.5°	238.9	238.9	237.0	235.0	237.0	237.6	235.8	233.8	233.1	232.5	226.1
50°	209.5	208.9	208.2	205.0	207.0	207.6	205.0	203.8	201.2	198.0	190.4
52.5°	184.0	183.4	182.6	179.5	180.8	181.4	178.9	176.2	173.1	170.5	161.0
55°	162.2	161.6	161.6	159.6	158.4	159.6	157.1	155.2	150.8	147.5	138.0
57.5°	143.8	143.8	142.5	140.5	141.1	141.1	138.6	136.0	132.2	128.4	120.8
60°	127.8	127.8	127.8	125.9	125.9	125.9	124.5	122.0	118.8	115.0	107.2
62.5°	115.0	115.0	114.4	112.4	113.0	113.0	111.8	109.2	106.0	103.5	95.8
65°	104.8	104.8	104.8	102.9	102.9	103.5	102.2	99.6	97.1	93.9	86.9
67.5°	92.0	91.4	91.4	90.0	90.8	91.4	90.0	88.1	85.0	83.0	76.6
70°	76.0	76.6	77.2	75.4	76.0	76.0	75.4	73.5	71.5	69.6	63.9
72.5°	62.0	62.0	61.4	60.6	60.6	61.4	60.0	58.1	56.9	55.6	51.1
75°	47.2	46.6	47.2	46.0	46.0	46.0	44.8	44.1	43.4	41.5	38.4
77.5°	34.5	33.9	33.9	32.6	33.2	33.2	32.6	31.2	30.0	29.4	26.9
80°	23.6	23.6	23.6	23.0	23.0	22.4	22.4	21.8	20.5	19.8	18.5
82.5°	16.0	16.0	16.0	15.4	15.4	15.4	14.8	14.0	13.4	12.8	11.5
85°	10.2	10.2	10.2	9.6	9.6	9.6	9.0	9.0	8.2	7.6	6.4
87.5°	5.8	5.8	5.8	5.1	5.1	5.1	5.1	5.1	4.5	3.9	3.2
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	668.1	668.1	668.1	668.1	668.1	668.1	668.1	668.1	668.1	668.1	668.1
2.5°	665.6	656.6	662.4	662.4	660.5	665.6	668.8	671.4	670.6	664.9	664.2
5°	660.5	652.8	659.1	659.9	657.9	664.9	669.4	672.6	673.2	668.1	668.8
7.5°	656.6	650.2	658.5	661.1	660.5	666.9	672.0	677.0	679.6	675.8	676.4
10°	654.8	649.6	658.5	662.4	663.0	670.0	677.8	684.8	687.9	685.4	687.2
12.5°	652.1	649.0	659.1	664.9	667.5	674.5	684.1	692.4	697.5	696.2	700.0
15°	649.6	647.0	659.1	667.5	670.6	677.0	687.9	700.0	705.8	705.1	710.2
17.5°	643.2	642.6	655.4	664.2	668.8	676.4	686.6	701.4	707.1	708.4	714.8
20°	633.0	633.0	647.0	656.6	661.8	668.8	681.5	695.6	702.6	703.9	710.9
22.5°	618.9	620.2	633.6	643.2	650.9	656.0	669.4	684.1	690.5	692.4	700.0
25°	600.4	601.8	614.5	624.0	632.4	638.1	650.9	664.2	672.0	673.9	679.6
27.5°	576.1	578.8	590.9	600.4	607.5	611.2	624.6	638.8	644.5	646.4	652.1
30°	548.0	548.6	560.8	569.1	576.1	579.4	590.9	605.5	610.0	611.9	620.2
32.5°	513.5	512.9	524.4	532.1	537.9	541.6	553.8	563.4	567.9	571.0	575.5
35°	472.0	471.4	479.8	488.6	493.1	494.4	506.5	516.8	519.2	521.9	527.6
37.5°	425.4	425.4	432.4	436.9	442.0	443.9	449.6	461.1	465.6	465.0	469.5
40°	376.2	373.6	378.8	383.2	384.5	385.1	390.9	399.9	403.0	403.0	406.2
42.5°	324.5	320.6	321.2	323.9	325.1	320.6	324.5	330.2	328.2	330.9	331.5
45°	269.5	263.8	261.2	255.5	256.8	252.2	249.8	251.0	250.4	244.0	245.2
47.5°	224.9	214.6	210.1	201.9	199.9	194.9	191.6	185.9	180.8	180.8	177.6
50°	187.1	176.9	168.0	158.4	155.2	150.8	143.8	136.0	132.2	128.4	125.2
52.5°	157.1	146.2	135.4	125.2	120.8	115.0	105.4	97.8	90.8	86.9	83.0
55°	132.9	120.8	109.2	98.4	92.6	86.9	77.2	68.4	60.0	54.9	51.8
57.5°	114.4	102.9	90.8	79.2	74.1	67.8	57.5	47.9	40.2	34.5	31.2
60°	100.9	89.4	78.6	66.4	61.4	54.9	44.1	35.1	27.5	22.4	18.5
62.5°	89.4	79.2	67.8	56.9	51.8	45.4	35.1	26.2	19.1	14.0	10.9
65°	81.1	70.9	61.4	50.5	46.0	39.6	30.0	21.8	15.4	10.9	7.6
67.5°	71.5	62.6	53.0	44.1	39.6	34.5	25.5	18.5	12.8	9.0	6.4
70°	60.0	53.0	44.8	36.4	33.2	28.8	21.1	15.4	10.2	7.0	5.1
72.5°	47.9	42.1	35.8	29.4	26.9	22.4	17.2	12.1	7.6	5.1	3.9
75°	36.4	31.9	26.9	22.4	19.8	17.2	12.8	9.0	5.8	3.9	2.5
77.5°	24.9	23.0	19.1	15.4	14.0	12.1	8.2	5.8	3.9	2.5	1.2
80°	17.2	15.4	12.8	10.2	9.0	7.6	5.1	3.9	1.9	1.2	0.6
82.5°	10.9	9.0	7.6	6.4	5.8	4.5	3.2	1.9	1.2	0.6	0.6
85°	5.8	5.1	4.5	3.2	3.2	2.5	1.9	1.2	0.6	0.0	0.0
87.5°	3.2	2.5	1.9	1.2	1.2	0.6	0.6	0.6	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°	668.1	668.1	668.1	668.1	668.1	668.1	668.1	668.1	668.1	668.1	668.1
2.5°	672.0	672.0	671.4	679.0	670.0	679.0	674.5	679.0	672.6	672.0	672.6
5°	677.0	679.0	679.6	686.6	678.4	689.2	685.4	689.2	684.8	686.0	687.9
7.5°	687.2	690.5	689.9	698.8	690.5	702.6	700.0	705.8	701.4	702.6	705.1
10°	698.8	702.6	703.2	712.2	704.5	719.2	716.0	722.4	718.6	720.5	723.8
12.5°	712.2	716.6	717.2	727.5	719.2	734.5	732.6	739.0	735.9	737.8	741.6
15°	722.4	728.8	730.1	740.2	731.4	747.4	746.0	754.4	749.2	752.4	755.6
17.5°	727.5	733.2	735.9	745.4	737.8	753.8	752.4	759.5	755.6	758.9	762.6
20°	724.4	731.4	733.2	742.9	735.2	751.1	749.2	756.2	752.4	755.0	758.9
22.5°	712.9	719.9	722.4	731.4	724.4	739.0	738.4	744.8	739.6	742.9	746.0
25°	692.4	700.0	701.4	709.6	702.0	717.2	716.0	723.0	719.2	721.1	725.6
27.5°	663.0	672.0	673.9	680.9	675.1	687.9	687.9	693.6	689.2	689.2	693.6
30°	627.9	636.9	638.1	643.9	638.8	650.2	650.9	656.6	649.6	653.4	654.1
32.5°	585.1	590.9	594.6	599.8	592.1	606.8	604.9	609.4	605.5	605.5	608.8
35°	533.4	540.4	542.2	548.6	542.2	553.8	553.8	556.4	552.5	552.5	557.6
37.5°	477.1	482.2	482.9	489.2	484.1	493.8	493.1	495.0	491.2	493.8	493.8
40°	411.4	415.1	416.5	419.6	419.0	426.0	425.4	426.6	424.8	425.4	426.6
42.5°	334.8	339.8	342.4	344.9	341.1	350.6	348.8	350.6	350.0	350.6	352.6
45°	246.5	250.4	252.2	253.0	251.6	257.4	261.9	258.0	258.8	257.4	260.0
47.5°	178.2	178.9	177.6	181.4	178.2	180.8	182.0	182.6	178.9	178.2	180.8
50°	122.0	125.2	120.8	122.6	122.0	124.5	123.2	123.9	120.1	122.0	120.8
52.5°	81.1	80.5	79.2	79.9	78.6	78.6	78.6	79.9	77.2	76.0	74.8
55°	49.1	47.9	45.4	44.8	44.8	45.4	44.1	42.8	42.8	42.1	42.1
57.5°	28.8	26.9	25.5	24.9	23.6	23.0	22.4	22.4	21.1	21.1	21.1
60°	16.0	14.0	12.8	11.5	11.5	10.9	10.2	9.6	9.6	9.6	9.0
62.5°	8.2	7.0	5.8	5.1	5.1	4.5	3.9	3.9	3.9	3.9	3.2
65°	5.8	4.5	3.9	3.2	3.2	2.5	2.5	2.5	2.5	2.5	2.5
67.5°	4.5	3.9	3.2	2.5	2.5	2.5	1.9	1.9	1.9	1.9	1.9
70°	3.9	2.5	2.5	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
72.5°	2.5	2.5	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
75°	1.9	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
77.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0
80°	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	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	0.0	0.0	0.0	0.0	0.0	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):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	668.1	668.1	668.1	668.1	668.1	668.1	668.1	668.1
2.5°	678.4	677.8	678.4	679.6	677.0	684.8	680.9	684.8
5°	693.0	693.6	694.2	696.2	693.0	702.6	697.5	703.2
7.5°	712.2	712.9	713.5	715.4	713.5	723.0	717.2	722.4
10°	732.0	733.2	733.2	736.5	734.5	743.5	739.6	746.0
12.5°	750.5	751.8	753.1	755.0	753.8	763.2	760.1	765.2
15°	765.2	767.8	768.4	771.0	769.6	779.9	776.1	781.1
17.5°	772.2	774.8	774.8	778.0	776.8	787.6	782.5	788.2
20°	768.4	770.4	771.0	774.1	772.9	783.8	778.6	785.6
22.5°	756.2	756.9	757.5	760.8	760.1	769.6	765.2	769.6
25°	733.9	735.9	735.2	737.8	737.8	745.4	740.2	744.1
27.5°	702.0	703.9	703.9	707.1	704.5	712.2	707.1	712.9
30°	663.0	664.9	663.6	666.2	663.6	671.4	667.5	669.4
32.5°	616.4	616.4	617.0	617.6	616.4	623.4	619.6	623.4
35°	560.8	562.1	562.8	563.4	562.1	567.2	562.8	565.2
37.5°	498.2	501.4	500.8	501.4	499.5	505.9	502.0	503.4
40°	431.1	431.1	430.5	431.8	429.9	435.0	432.4	433.8
42.5°	353.2	355.1	352.6	355.8	350.6	357.8	355.1	353.2
45°	265.1	262.5	261.9	262.5	260.6	261.2	263.1	261.9
47.5°	180.8	180.8	179.5	177.6	180.1	180.8	178.2	178.2
50°	121.4	121.4	120.1	119.5	120.8	120.1	118.8	120.8
52.5°	77.2	74.8	74.8	76.0	74.8	73.5	75.4	74.1
55°	42.1	40.9	40.9	42.1	40.9	40.9	40.2	41.5
57.5°	20.5	21.1	20.5	20.5	20.5	20.5	19.8	20.5
60°	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
62.5°	3.9	3.9	3.2	3.2	3.2	3.2	3.2	3.2
65°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
67.5°	1.9	1.9	1.9	1.9	1.9	2.5	1.9	1.9
70°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
72.5°	1.9	1.9	2.5	2.5	2.5	2.5	2.5	2.5
75°	1.2	1.2	1.2	0.6	0.6	0.6	0.6	0.6
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	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



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— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)