

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P856977

Luminaire Tested: **LX4C15D010 EX4C159040 4LBLWW***

Issue Date: 2/9/2022



Test Information

Test Method: LM-79-08
Report Number: P856977
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-1)
Test Lab: INNOVATION CENTER
Issue Date: 2/9/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LX4C15D010 EX4C159040 4LBLWW*
Description: 4 INCH 1500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND 4LRLWW TRIM WITH * FINISH
Light Source: -
Ballast/Driver: -

Summary

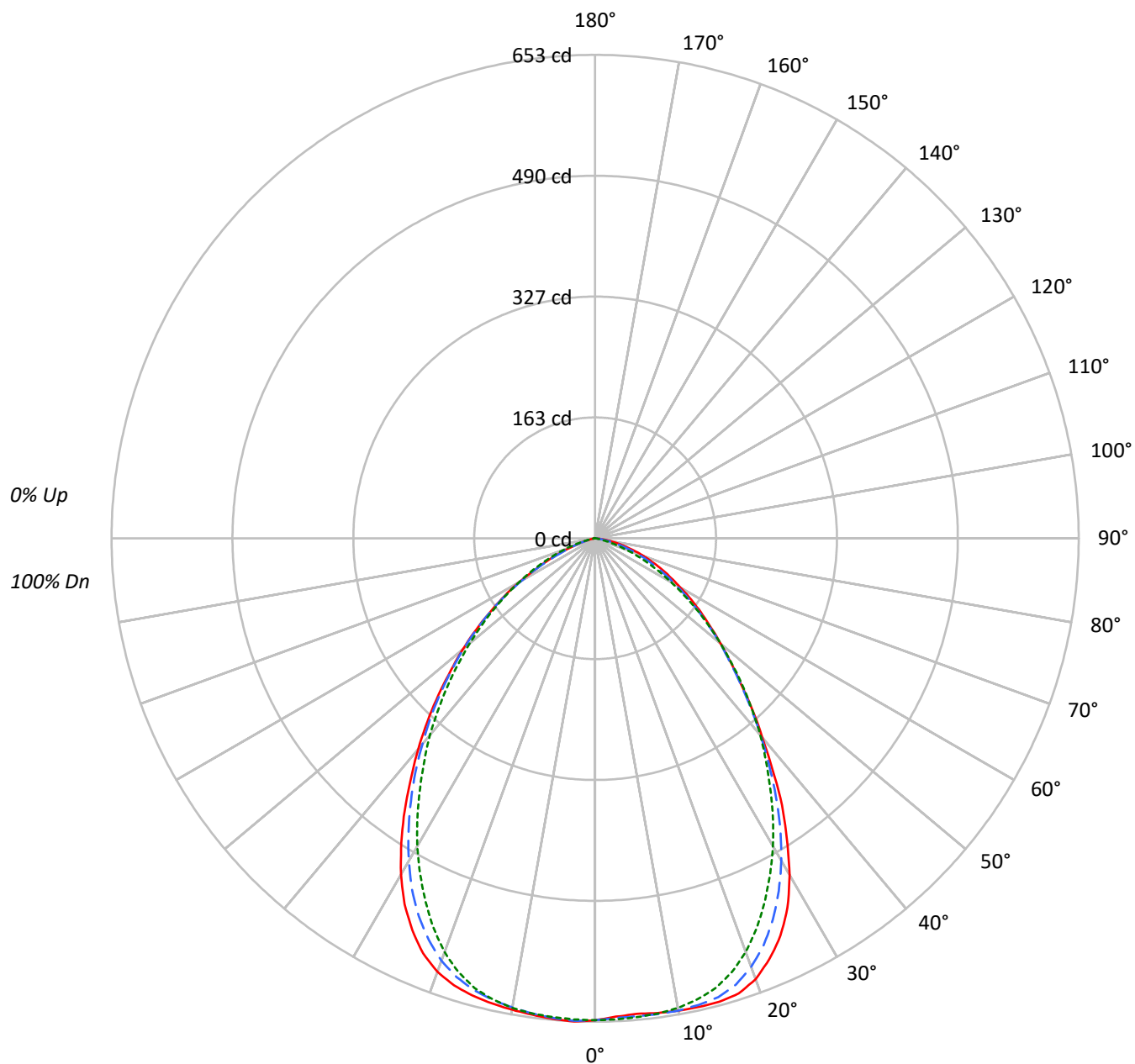
Lumens per Lamp: N/A
Luminaire Lumens: 1248.0 lumens
Efficiency: N/A
Efficacy: 79.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.18
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 15.8
Input Voltage (V):
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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	111	107	104	101	109	105	102	99	101	99	96		97	95	93		94
2	103	96	91	86	101	95	89	85	91	87	83		88	84	81		85
3	95	87	80	74	93	85	79	74	82	77	72		80	75	71		77
4	88	78	71	65	86	77	70	65	75	69	64		72	67	63		70
5	82	71	63	57	80	70	63	57	68	61	57		66	60	56		64
6	76	65	57	51	75	64	56	51	62	56	51		61	55	50		59
7	71	59	51	46	70	59	51	46	57	50	46		56	50	45		54
8	67	55	47	42	65	54	47	42	53	46	41		52	46	41		50
9	63	51	43	38	61	50	43	38	49	42	38		48	42	38		47
10	59	47	40	35	58	46	39	35	45	39	35		45	39	35		44

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	79978	79978	79978
5°	79519	80061	80369
10°	80837	80351	80663
15°	82417	80001	81336
20°	82836	77750	81463
25°	80289	73429	79191
30°	74519	68135	74377
35°	65990	61805	67234
40°	56259	55666	59627
45°	48335	48891	51949
50°	42182	42277	44532
55°	37269	35705	36905
60°	32679	29141	29018
65°	28924	22587	20116
70°	24677	15553	11925
75°	19936	8354	5459
80°	13654	2052	1415
85°	4088	705	705



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.9	5.0
10°-20°	179.1	14.4
20°-30°	258.8	20.7
30°-40°	267.5	21.4
40°-50°	221.0	17.7
50°-60°	152.6	12.2
60°-70°	79.9	6.4
70°-80°	25.1	2.0
80°-90°	2.1	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°	499.7	40.0
0°-40°	767.3	61.5
0°-60°	1140.9	91.4
0°-90°	1248.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1248.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	651	651	651	651	651	
5°	645	648	649	650	652	62
15°	648	642	629	632	640	183
25°	592	568	542	563	584	270
35°	440	425	412	434	448	273
45°	278	277	281	294	299	217
55°	174	169	167	171	172	156
65°	100	90	78	64	69	99
75°	42	33	18	12	12	45
85°	3	2	0	0	0	6
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°	651.0	651.0	651.0	651.0	651.0	651.0	651.0	651.0	651.0	651.0	651.0
2.5°	646.8	647.0	647.0	647.5	647.5	647.5	647.8	647.8	648.0	648.3	648.5
5°	644.8	644.8	645.3	645.6	646.1	646.3	646.8	647.0	647.5	647.8	648.0
7.5°	646.8	646.8	647.0	647.3	647.3	647.5	647.5	647.8	648.0	648.3	648.3
10°	648.0	648.0	648.0	648.0	648.3	648.3	648.3	648.0	648.0	648.0	647.8
12.5°	648.5	648.5	648.3	648.0	648.3	648.0	648.0	647.3	646.8	646.3	645.6
15°	648.0	648.0	647.8	647.5	647.3	646.8	646.6	645.3	644.4	642.9	641.9
17.5°	644.8	644.4	643.9	643.4	642.4	641.7	641.2	639.0	637.3	634.8	632.1
20°	633.6	633.1	632.4	631.2	629.9	629.0	627.5	624.3	622.6	618.9	616.2
22.5°	615.3	614.8	615.0	612.8	610.4	608.9	607.9	605.2	602.3	597.7	594.7
25°	592.3	590.8	590.8	587.4	586.2	585.2	584.0	580.8	576.4	572.2	568.3
27.5°	562.5	560.5	559.5	559.0	556.1	553.9	552.2	549.8	546.1	542.4	537.0
30°	525.3	525.1	523.8	521.6	519.4	518.5	516.5	512.4	508.9	506.2	502.8
32.5°	481.6	481.3	481.3	481.3	479.8	479.6	476.7	474.5	471.8	467.6	465.4
35°	440.0	439.8	440.0	436.3	435.4	434.6	434.4	432.9	429.2	427.3	425.3
37.5°	393.1	393.8	393.3	392.3	393.6	391.4	393.1	389.9	388.4	387.9	385.7
40°	350.8	352.7	350.8	351.0	352.2	350.0	350.0	349.6	348.6	348.1	347.6
42.5°	314.6	312.2	313.6	312.4	313.6	312.9	311.7	312.4	312.6	311.7	311.4
45°	278.2	278.7	279.2	278.4	278.4	277.7	279.6	278.4	278.4	278.7	277.0
47.5°	248.6	247.9	248.4	247.9	248.1	247.6	248.1	248.4	247.9	247.9	246.4
50°	220.7	220.2	222.0	220.5	220.5	220.2	220.5	220.0	219.3	219.3	219.8
52.5°	196.5	195.6	195.3	196.5	194.8	194.8	195.1	194.6	193.6	193.1	191.9
55°	174.0	173.8	174.0	173.1	172.6	172.6	171.4	170.9	170.6	169.4	168.7
57.5°	153.0	152.3	152.5	152.3	151.3	151.1	150.1	150.1	149.1	148.1	146.9
60°	133.0	133.0	133.7	132.7	132.0	131.5	131.0	130.5	128.8	127.1	125.6
62.5°	115.1	115.4	115.1	114.4	113.9	113.4	112.9	111.5	110.0	109.0	107.3
65°	99.5	99.2	98.5	98.0	96.8	96.8	95.8	95.1	93.4	91.9	90.2
67.5°	83.4	82.9	82.9	82.9	81.4	81.2	80.7	79.2	77.7	75.8	74.3
70°	68.7	69.2	68.4	67.7	67.0	66.7	66.0	64.5	62.8	60.9	59.6
72.5°	54.8	55.2	54.5	54.3	52.8	52.3	52.1	50.8	48.9	47.7	45.7
75°	42.0	42.3	41.8	41.3	40.3	40.1	38.9	37.9	36.7	34.7	33.0
77.5°	30.3	29.8	29.8	28.8	27.9	27.9	27.6	26.2	24.4	23.0	21.5
80°	19.3	19.1	18.3	17.8	17.1	16.9	16.6	15.4	14.2	13.2	12.2
82.5°	9.8	9.5	9.3	9.0	8.6	8.1	8.3	7.3	6.8	5.9	5.1
85°	2.9	3.2	3.2	2.9	2.7	2.7	2.7	2.4	2.0	1.7	1.5
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	651.0	651.0	651.0	651.0	651.0	651.0	651.0	651.0	651.0	651.0	651.0
2.5°	648.8	649.0	649.2	649.5	649.5	649.7	650.0	650.2	650.5	650.5	650.7
5°	648.3	648.8	648.8	649.0	649.0	649.0	649.2	649.2	649.2	649.2	649.5
7.5°	648.5	648.5	648.5	648.3	648.3	648.0	648.0	648.0	647.5	647.5	647.5
10°	647.3	647.0	646.8	646.3	646.1	645.8	645.3	644.8	644.4	644.1	643.6
12.5°	644.8	643.9	642.9	641.9	641.4	641.2	640.2	639.5	638.7	638.0	637.5
15°	640.0	638.5	636.8	634.8	634.3	633.8	632.1	630.7	629.7	629.0	627.7
17.5°	630.2	627.2	625.3	622.4	621.1	620.6	618.0	616.5	614.8	614.3	613.3
20°	612.8	610.1	606.5	603.8	602.3	600.8	598.6	596.7	594.7	594.7	593.5
22.5°	591.1	587.6	583.0	579.6	579.3	576.4	574.4	572.2	571.5	570.0	570.0
25°	563.7	560.8	555.6	552.7	551.2	550.5	547.3	544.4	542.9	541.7	542.7
27.5°	533.4	529.0	525.1	521.4	520.2	518.7	515.8	514.6	511.9	511.6	511.4
30°	498.7	494.3	490.4	488.6	486.2	485.0	482.8	481.3	480.3	480.3	479.8
32.5°	462.2	458.3	456.4	452.7	451.5	449.8	448.3	446.8	447.3	446.8	447.1
35°	422.9	421.9	418.2	416.0	416.0	415.8	413.4	412.4	411.9	412.1	413.4
37.5°	385.5	382.6	380.1	378.6	379.9	378.4	378.2	378.2	379.6	378.6	380.6
40°	345.6	345.4	344.4	344.9	345.2	343.4	343.9	344.2	345.2	347.1	347.4
42.5°	310.9	310.7	310.7	310.7	310.2	309.2	310.2	311.9	311.7	313.1	314.4
45°	277.4	277.0	277.9	277.2	278.7	279.2	278.4	278.9	280.4	281.4	283.3
47.5°	246.9	246.9	247.1	247.6	246.2	247.4	247.9	248.8	249.6	250.1	251.0
50°	218.5	218.5	218.0	218.0	218.0	218.8	217.8	219.0	219.3	221.2	222.4
52.5°	192.4	191.2	191.9	191.4	190.4	189.9	190.4	190.7	192.1	192.6	194.1
55°	167.4	167.4	165.5	165.0	165.7	165.5	165.2	165.2	166.0	166.7	167.9
57.5°	145.4	144.0	142.5	142.3	141.5	141.8	141.8	141.5	141.0	141.3	141.5
60°	124.7	123.7	121.5	121.5	121.2	121.0	119.8	119.5	118.3	118.6	117.6
62.5°	105.6	105.1	102.2	101.2	101.2	100.5	99.2	99.0	97.3	97.3	96.3
65°	88.5	87.0	85.3	83.6	83.6	82.6	81.9	79.7	78.5	77.7	76.3
67.5°	72.8	70.6	68.9	67.5	66.5	66.2	64.5	63.1	61.1	59.9	57.7
70°	57.7	56.0	54.3	52.8	51.8	50.8	49.1	46.9	45.5	43.3	41.8
72.5°	43.5	42.0	40.6	38.6	37.4	36.7	35.0	33.0	30.6	29.1	27.1
75°	31.3	29.6	27.6	25.9	25.2	24.4	22.5	21.0	19.3	17.6	15.6
77.5°	20.3	18.3	16.9	14.9	14.7	14.2	12.2	10.8	9.5	8.6	7.3
80°	10.8	9.8	8.6	7.3	6.8	6.1	5.1	4.4	3.7	2.9	2.4
82.5°	4.6	3.9	3.2	2.7	2.4	2.2	1.7	1.5	1.2	1.2	1.0
85°	1.2	1.0	1.0	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.5
87.5°	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.2	0.2	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°	651.0	651.0	651.0	651.0	651.0	651.0	651.0	651.0	651.0	651.0	651.0
2.5°	651.0	651.2	651.4	651.4	651.7	651.9	651.9	652.2	652.4	652.7	652.7
5°	649.7	649.7	649.7	650.0	650.0	650.0	650.0	650.5	650.5	650.7	651.0
7.5°	647.3	647.3	647.3	647.3	647.0	647.3	647.0	647.0	647.5	647.8	648.0
10°	643.4	643.1	643.1	642.9	642.9	642.9	643.1	643.4	643.6	643.9	644.6
12.5°	637.3	637.0	637.0	636.8	636.8	637.0	637.3	637.8	638.7	639.2	640.2
15°	627.5	627.2	627.5	627.7	628.2	629.0	629.7	630.4	631.9	633.1	634.3
17.5°	613.3	613.6	613.8	614.3	615.0	616.0	618.0	619.9	621.6	623.6	625.5
20°	593.8	594.7	595.0	596.7	597.2	599.4	601.6	604.5	607.2	609.6	612.3
22.5°	570.3	571.0	572.0	574.0	575.2	578.1	580.8	584.2	587.2	590.3	594.2
25°	543.6	543.9	546.8	546.8	549.8	552.2	555.4	559.0	563.4	567.6	570.3
27.5°	513.3	514.6	516.8	517.7	519.9	523.8	526.5	530.9	535.3	539.0	541.9
30°	481.6	482.5	486.2	486.7	488.4	491.8	495.5	499.6	503.1	507.2	509.9
32.5°	448.1	450.8	453.0	454.7	455.2	460.3	462.2	465.2	469.1	473.2	475.9
35°	415.6	416.8	420.0	420.9	422.4	425.3	429.2	431.7	433.6	436.3	439.5
37.5°	381.1	384.8	385.5	388.4	388.9	391.6	393.6	396.5	398.9	401.4	401.9
40°	349.1	350.3	353.0	353.7	354.2	357.9	360.3	361.0	362.3	364.5	367.4
42.5°	316.6	317.8	320.7	320.0	322.2	323.9	325.1	328.0	329.3	330.0	330.0
45°	284.5	285.0	287.0	288.0	289.2	290.2	292.4	293.8	294.3	296.5	297.2
47.5°	254.0	254.5	255.9	257.6	257.2	258.4	260.8	261.6	261.8	263.3	264.0
50°	223.9	225.1	227.1	226.6	228.1	228.8	231.0	231.5	231.5	231.7	232.0
52.5°	195.8	196.8	197.3	197.8	198.5	199.7	200.7	200.2	201.2	202.2	201.4
55°	167.9	168.7	169.9	170.4	170.4	170.6	170.1	172.3	171.4	171.1	171.4
57.5°	142.5	141.5	141.3	142.5	143.0	142.8	142.0	143.0	143.0	142.5	141.8
60°	117.8	117.1	116.8	117.1	116.1	115.4	115.9	115.4	114.2	113.7	113.9
62.5°	95.3	94.6	92.6	92.6	92.2	91.9	90.0	90.2	89.2	87.8	88.2
65°	74.6	72.6	71.6	71.4	69.7	68.2	67.7	66.0	64.5	64.3	64.5
67.5°	56.0	53.8	52.1	51.3	50.4	49.1	47.4	46.0	46.4	46.2	47.2
70°	38.9	37.4	35.7	34.5	35.0	33.5	32.5	32.5	32.8	33.0	33.5
72.5°	25.9	24.0	23.2	22.5	22.0	21.0	21.5	21.5	21.3	21.5	21.0
75°	14.7	13.7	13.0	12.7	12.2	12.2	12.2	12.2	12.0	11.7	11.7
77.5°	6.6	6.1	5.9	5.6	5.6	5.6	5.4	5.1	5.1	5.1	4.9
80°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
82.5°	1.0	1.0	1.2	1.2	1.2	1.0	1.2	1.2	1.0	1.0	1.2
85°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
87.5°	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.0	0.2	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



TEST NUMBER: P856977

CATALOG NUMBER: LX4C15D010 EX4C159040 4LBLWW*

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	651.0	651.0	651.0	651.0	651.0	651.0	651.0	651.0
2.5°	652.9	653.2	653.2	653.2	653.4	653.4	653.4	653.4
5°	651.2	651.4	651.4	651.4	651.7	651.7	651.7	651.7
7.5°	648.3	648.5	648.5	648.8	648.8	649.0	649.0	649.2
10°	644.8	645.3	645.6	645.8	646.1	646.3	646.3	646.6
12.5°	641.2	641.7	641.9	642.4	642.9	643.1	643.4	643.6
15°	635.8	636.8	637.3	637.5	638.5	639.0	639.2	639.5
17.5°	627.2	629.2	629.9	630.4	631.4	632.4	633.1	633.4
20°	615.0	617.2	618.2	619.4	620.9	622.1	622.6	623.1
22.5°	597.9	600.4	601.8	603.3	604.5	605.7	607.7	607.0
25°	573.5	577.6	579.3	580.1	582.8	584.2	585.2	584.2
27.5°	546.1	548.5	550.0	551.7	553.7	555.1	555.6	557.1
30°	513.1	517.2	517.0	518.7	521.2	522.6	523.1	524.3
32.5°	478.9	480.8	482.3	482.0	483.0	485.7	484.7	486.9
35°	442.4	442.7	445.1	444.9	446.8	446.8	446.8	448.3
37.5°	403.6	406.5	405.3	408.2	407.2	408.0	408.0	408.5
40°	368.1	369.1	369.1	370.1	370.8	370.1	370.6	371.8
42.5°	331.5	332.4	332.7	332.2	332.9	335.1	333.4	334.9
45°	297.2	298.0	299.0	298.2	299.4	298.7	299.4	299.0
47.5°	265.0	264.7	264.5	266.4	264.7	265.0	266.0	264.2
50°	232.0	233.4	232.5	233.2	233.7	233.7	233.0	233.0
52.5°	202.6	202.4	201.7	202.4	201.9	202.2	202.6	202.2
55°	172.3	173.3	172.8	172.6	172.8	172.8	174.3	172.3
57.5°	142.5	142.0	142.8	144.5	142.8	144.0	144.7	145.0
60°	114.2	114.2	115.6	114.9	116.4	117.6	118.6	118.1
62.5°	87.0	88.2	88.7	89.0	90.4	91.4	91.4	91.2
65°	64.5	66.2	66.2	67.2	67.7	67.7	68.2	69.2
67.5°	47.7	47.7	47.9	48.4	48.2	48.2	48.6	48.9
70°	33.2	32.8	33.5	33.2	33.2	33.0	33.2	33.2
72.5°	21.0	21.0	21.3	21.0	20.5	20.8	20.8	21.3
75°	11.2	11.7	11.2	11.2	11.5	11.0	11.2	11.5
77.5°	4.6	4.6	4.6	4.6	4.6	4.4	4.4	4.4
80°	2.2	2.2	2.2	2.2	2.2	2.2	2.0	2.0
82.5°	1.0	1.2	1.0	1.2	1.0	1.0	1.0	1.0
85°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
87.5°	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.2
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)