

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: P857000

Luminaire Tested: **LX4C15D010 EX4C159050 4LBLWW***

Issue Date: 2/9/2022



Test Information

Test Method: LM-79-08
Report Number: P857000
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 EX4C159050 4LBLWW*
Description: 4 INCH 1500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS
AND 4LRLWW TRIM WITH * FINISH
Light Source: -
Ballast/Driver: -

Summary

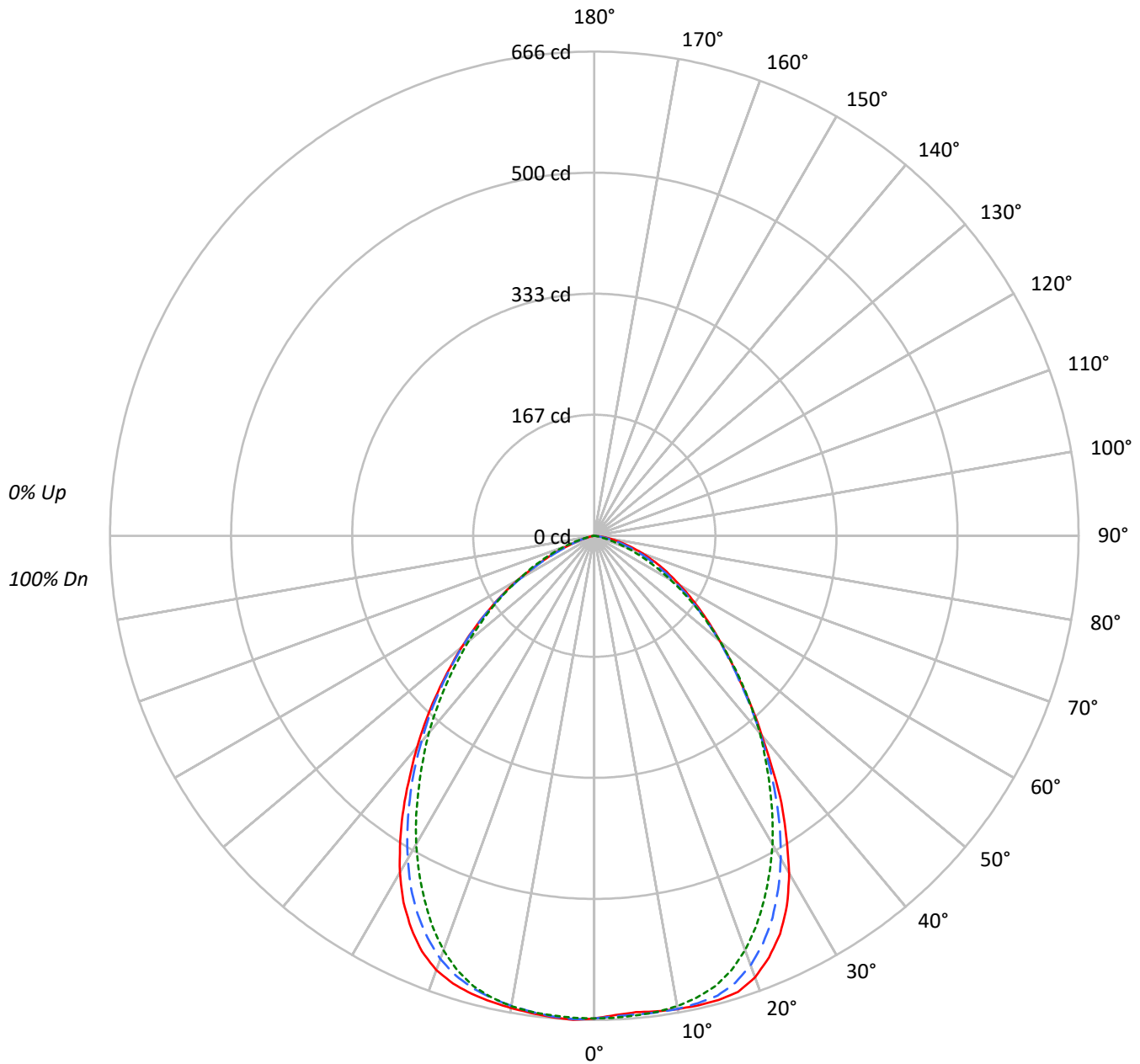
Lumens per Lamp: N/A
Luminaire Lumens: 1273.0 lumens
Efficiency: N/A
Efficacy: 80.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.18
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P857000

CATALOG NUMBER: LX4C15D010 EX4C159050 4LBLWW*

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	30	10	50	30	10
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	99	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	74	93	85	79	74	82	77	72	80	75	71	77	73	70	68		
4	88	78	71	65	86	77	70	65	75	69	64	72	67	63	70	66	62	60		
5	82	71	63	57	80	70	63	57	68	61	57	66	60	56	64	59	55	54		
6	76	65	57	51	75	64	56	51	62	56	51	61	55	50	59	54	50	48		
7	71	59	51	46	70	59	51	46	57	50	46	56	50	45	54	49	45	43		
8	67	55	47	42	65	54	47	42	53	46	41	52	46	41	50	45	41	39		
9	63	51	43	38	61	50	43	38	49	42	38	48	42	38	47	41	37	36		
10	59	47	40	35	58	46	39	35	45	39	35	45	39	35	44	38	34	33		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	81575	81575	81575
5°	81122	81664	81973
10°	82459	81960	82272
15°	84071	81603	82964
20°	84496	79306	83097
25°	81902	74893	80777
30°	76008	69511	75866
35°	67309	63050	68584
40°	57382	56788	60814
45°	49290	49864	52974
50°	43042	43137	45412
55°	38018	36433	37654
60°	33318	29706	29583
65°	29506	23052	20523
70°	25180	15841	12177
75°	20363	8544	5554
80°	13937	2122	1415
85°	4229	705	705



TEST NUMBER: P857000

CATALOG NUMBER: LX4C15D010 EX4C159050 4LBLWW*

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.1	5.0
10°-20°	182.7	14.4
20°-30°	264.0	20.7
30°-40°	272.9	21.4
40°-50°	225.5	17.7
50°-60°	155.6	12.2
60°-70°	81.5	6.4
70°-80°	25.6	2.0
80°-90°	2.2	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°	509.8	40.0
0°-40°	782.6	61.5
0°-60°	1163.7	91.4
0°-90°	1273.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1273.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	664	664	664	664	664	
5°	658	661	662	664	665	63
15°	661	655	642	644	652	186
25°	604	580	552	575	596	276
35°	449	434	420	442	457	279
45°	284	282	287	300	305	221
55°	178	172	170	175	176	159
65°	102	92	79	66	71	101
75°	43	34	18	12	12	46
85°	3	2	0	0	0	6
90°	0	0	0	0	0	



TEST NUMBER: P857000

CATALOG NUMBER: LX4C15D010 EX4C159050 4LBLWW*

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	664.0	664.0	664.0	664.0	664.0	664.0	664.0	664.0	664.0	664.0	664.0
2.5°	659.8	660.0	660.0	660.5	660.5	660.5	660.8	660.8	661.0	661.3	661.5
5°	657.8	657.8	658.3	658.5	659.0	659.3	659.8	660.0	660.5	660.8	661.0
7.5°	659.8	659.8	660.0	660.3	660.3	660.5	660.5	660.8	661.0	661.3	661.3
10°	661.0	661.0	661.0	661.0	661.3	661.3	661.3	661.0	661.0	661.0	660.8
12.5°	661.5	661.5	661.3	661.0	661.3	661.0	661.0	660.3	659.8	659.3	658.5
15°	661.0	661.0	660.8	660.5	660.3	659.8	659.5	658.3	657.3	655.8	654.8
17.5°	657.8	657.3	656.8	656.3	655.3	654.5	654.0	651.8	650.0	647.5	644.8
20°	646.3	645.8	645.0	643.8	642.6	641.6	640.1	636.8	635.1	631.3	628.6
22.5°	627.6	627.1	627.3	625.1	622.6	621.1	620.1	617.4	614.4	609.6	606.6
25°	604.2	602.7	602.7	599.2	597.9	596.9	595.7	592.4	587.9	583.7	579.7
27.5°	573.7	571.7	570.7	570.2	567.3	565.0	563.3	560.8	557.0	553.3	547.8
30°	535.8	535.6	534.3	532.1	529.8	528.9	526.9	522.6	519.1	516.4	512.9
32.5°	491.2	491.0	491.0	491.0	489.5	489.2	486.2	484.0	481.2	477.0	474.7
35°	448.8	448.6	448.8	445.1	444.1	443.3	443.1	441.6	437.8	435.8	433.9
37.5°	400.9	401.7	401.2	400.2	401.4	399.2	400.9	397.7	396.2	395.7	393.5
40°	357.8	359.8	357.8	358.1	359.3	357.1	357.1	356.6	355.6	355.1	354.6
42.5°	320.9	318.4	319.9	318.7	319.9	319.2	317.9	318.7	318.9	317.9	317.7
45°	283.7	284.2	284.7	284.0	284.0	283.3	285.2	284.0	284.0	284.2	282.5
47.5°	253.6	252.8	253.3	252.8	253.1	252.6	253.1	253.3	252.8	252.8	251.3
50°	225.2	224.7	226.4	224.9	224.9	224.7	224.9	224.4	223.7	223.7	224.2
52.5°	200.5	199.5	199.2	200.5	198.7	198.7	199.0	198.5	197.5	197.0	195.7
55°	177.5	177.3	177.5	176.5	176.0	176.0	174.8	174.3	174.0	172.8	172.0
57.5°	156.1	155.3	155.6	155.3	154.3	154.1	153.1	153.1	152.1	151.1	149.9
60°	135.6	135.6	136.4	135.4	134.6	134.1	133.6	133.1	131.4	129.7	128.2
62.5°	117.4	117.7	117.4	116.7	116.2	115.7	115.2	113.7	112.2	111.2	109.5
65°	101.5	101.2	100.5	100.0	98.7	98.7	97.7	97.0	95.2	93.8	92.0
67.5°	85.0	84.5	84.5	84.5	83.0	82.8	82.3	80.8	79.3	77.3	75.8
70°	70.1	70.6	69.8	69.1	68.3	68.1	67.3	65.8	64.1	62.1	60.8
72.5°	55.9	56.4	55.6	55.4	53.9	53.4	53.1	51.9	49.9	48.6	46.6
75°	42.9	43.1	42.6	42.1	41.1	40.9	39.6	38.6	37.4	35.4	33.7
77.5°	30.9	30.4	30.4	29.4	28.4	28.4	28.2	26.7	24.9	23.4	21.9
80°	19.7	19.4	18.7	18.2	17.5	17.2	17.0	15.7	14.5	13.5	12.5
82.5°	10.0	9.7	9.5	9.2	8.7	8.2	8.5	7.5	7.0	6.0	5.2
85°	3.0	3.2	3.2	3.0	2.7	2.7	2.7	2.5	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



TEST NUMBER: P857000

CATALOG NUMBER: LX4C15D010 EX4C159050 4LBLWW*

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	664.0	664.0	664.0	664.0	664.0	664.0	664.0	664.0	664.0	664.0	664.0
2.5°	661.8	662.0	662.2	662.5	662.5	662.7	663.0	663.2	663.5	663.5	663.7
5°	661.3	661.8	661.8	662.0	662.0	662.0	662.2	662.2	662.2	662.2	662.5
7.5°	661.5	661.5	661.5	661.3	661.3	661.0	661.0	661.0	660.5	660.5	660.5
10°	660.3	660.0	659.8	659.3	659.0	658.8	658.3	657.8	657.3	657.0	656.5
12.5°	657.8	656.8	655.8	654.8	654.3	654.0	653.0	652.3	651.5	650.8	650.3
15°	652.8	651.3	649.5	647.5	647.0	646.5	644.8	643.3	642.3	641.6	640.3
17.5°	642.8	639.8	637.8	634.8	633.6	633.1	630.3	628.8	627.1	626.6	625.6
20°	625.1	622.4	618.6	615.9	614.4	612.9	610.6	608.6	606.6	606.6	605.4
22.5°	602.9	599.4	594.7	591.2	590.9	587.9	586.0	583.7	583.0	581.5	581.5
25°	575.0	572.0	566.8	563.8	562.3	561.5	558.3	555.3	553.8	552.5	553.5
27.5°	544.1	539.6	535.6	531.8	530.6	529.1	526.1	524.9	522.1	521.9	521.6
30°	508.7	504.2	500.2	498.4	495.9	494.7	492.4	491.0	490.0	490.0	489.5
32.5°	471.5	467.5	465.5	461.8	460.5	458.8	457.3	455.8	456.3	455.8	456.0
35°	431.4	430.4	426.6	424.4	424.4	424.1	421.6	420.6	420.1	420.4	421.6
37.5°	393.2	390.2	387.7	386.2	387.5	386.0	385.7	385.7	387.2	386.2	388.2
40°	352.6	352.3	351.3	351.8	352.1	350.3	350.8	351.1	352.1	354.1	354.3
42.5°	317.2	316.9	316.9	316.9	316.4	315.4	316.4	318.2	317.9	319.4	320.7
45°	283.0	282.5	283.5	282.8	284.2	284.7	284.0	284.5	286.0	287.0	289.0
47.5°	251.8	251.8	252.1	252.6	251.1	252.3	252.8	253.8	254.6	255.1	256.1
50°	222.9	222.9	222.4	222.4	222.4	223.2	222.2	223.4	223.7	225.7	226.9
52.5°	196.2	195.0	195.7	195.2	194.2	193.7	194.2	194.5	196.0	196.5	198.0
55°	170.8	170.8	168.8	168.3	169.1	168.8	168.6	168.6	169.3	170.1	171.3
57.5°	148.4	146.9	145.4	145.1	144.4	144.6	144.6	144.4	143.9	144.1	144.4
60°	127.2	126.2	123.9	123.9	123.7	123.4	122.2	121.9	120.7	120.9	119.9
62.5°	107.7	107.2	104.2	103.2	103.2	102.5	101.2	101.0	99.2	99.2	98.2
65°	90.3	88.8	87.0	85.3	85.3	84.3	83.5	81.3	80.0	79.3	77.8
67.5°	74.3	72.1	70.3	68.8	67.8	67.6	65.8	64.3	62.3	61.1	58.8
70°	58.8	57.1	55.4	53.9	52.9	51.9	50.1	47.9	46.4	44.1	42.6
72.5°	44.4	42.9	41.4	39.4	38.1	37.4	35.7	33.7	31.2	29.7	27.7
75°	31.9	30.2	28.2	26.4	25.7	24.9	22.9	21.4	19.7	18.0	16.0
77.5°	20.7	18.7	17.2	15.2	15.0	14.5	12.5	11.0	9.7	8.7	7.5
80°	11.0	10.0	8.7	7.5	7.0	6.2	5.2	4.5	3.7	3.0	2.5
82.5°	4.7	4.0	3.2	2.7	2.5	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



TEST NUMBER: P857000

CATALOG NUMBER: LX4C15D010 EX4C159050 4LBLWW*

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	664.0	664.0	664.0	664.0	664.0	664.0	664.0	664.0	664.0	664.0	664.0
2.5°	664.0	664.2	664.5	664.5	664.7	665.0	665.0	665.2	665.5	665.7	665.7
5°	662.7	662.7	662.7	663.0	663.0	663.0	663.0	663.5	663.5	663.7	664.0
7.5°	660.3	660.3	660.3	660.3	660.0	660.3	660.0	660.0	660.5	660.8	661.0
10°	656.3	656.0	656.0	655.8	655.8	655.8	656.0	656.3	656.5	656.8	657.5
12.5°	650.0	649.8	649.8	649.5	649.5	649.8	650.0	650.5	651.5	652.0	653.0
15°	640.1	639.8	640.1	640.3	640.8	641.6	642.3	643.1	644.5	645.8	647.0
17.5°	625.6	625.8	626.1	626.6	627.3	628.3	630.3	632.3	634.1	636.1	638.1
20°	605.6	606.6	606.9	608.6	609.1	611.4	613.6	616.6	619.4	621.9	624.6
22.5°	581.7	582.5	583.5	585.5	586.7	589.7	592.4	595.9	598.9	602.2	606.1
25°	554.5	554.8	557.8	557.8	560.8	563.3	566.5	570.2	574.7	579.0	581.7
27.5°	523.6	524.9	527.1	528.1	530.3	534.3	537.1	541.6	546.1	549.8	552.8
30°	491.2	492.2	495.9	496.4	498.2	501.7	505.4	509.7	513.1	517.4	520.1
32.5°	457.0	459.8	462.0	463.8	464.3	469.5	471.5	474.5	478.5	482.7	485.5
35°	423.9	425.1	428.4	429.4	430.9	433.9	437.8	440.3	442.3	445.1	448.3
37.5°	388.7	392.5	393.2	396.2	396.7	399.4	401.4	404.4	406.9	409.4	409.9
40°	356.1	357.3	360.0	360.8	361.3	365.0	367.5	368.3	369.5	371.8	374.8
42.5°	322.9	324.1	327.1	326.4	328.6	330.4	331.6	334.6	335.9	336.6	336.6
45°	290.2	290.7	292.7	293.7	295.0	296.0	298.2	299.7	300.2	302.5	303.2
47.5°	259.1	259.6	261.1	262.8	262.3	263.6	266.0	266.8	267.0	268.5	269.3
50°	228.4	229.6	231.6	231.1	232.6	233.4	235.6	236.1	236.1	236.4	236.6
52.5°	199.7	200.7	201.2	201.7	202.5	203.7	204.7	204.2	205.2	206.2	205.5
55°	171.3	172.0	173.3	173.8	173.8	174.0	173.5	175.8	174.8	174.5	174.8
57.5°	145.4	144.4	144.1	145.4	145.9	145.6	144.9	145.9	145.9	145.4	144.6
60°	120.2	119.4	119.2	119.4	118.4	117.7	118.2	117.7	116.4	115.9	116.2
62.5°	97.2	96.5	94.5	94.5	94.0	93.8	91.8	92.0	91.0	89.5	90.0
65°	76.0	74.1	73.1	72.8	71.1	69.6	69.1	67.3	65.8	65.6	65.8
67.5°	57.1	54.9	53.1	52.4	51.4	50.1	48.4	46.9	47.4	47.1	48.1
70°	39.6	38.1	36.4	35.2	35.7	34.2	33.2	33.2	33.4	33.7	34.2
72.5°	26.4	24.4	23.7	22.9	22.4	21.4	21.9	21.9	21.7	21.9	21.4
75°	15.0	14.0	13.2	13.0	12.5	12.5	12.5	12.5	12.2	12.0	12.0
77.5°	6.7	6.2	6.0	5.7	5.7	5.7	5.5	5.2	5.2	5.2	5.0
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: P857000

CATALOG NUMBER: LX4C15D010 EX4C159050 4LBLWW*

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	664.0	664.0	664.0	664.0	664.0	664.0	664.0	664.0
2.5°	666.0	666.2	666.2	666.2	666.5	666.5	666.5	666.5
5°	664.2	664.5	664.5	664.5	664.7	664.7	664.7	664.7
7.5°	661.3	661.5	661.5	661.8	661.8	662.0	662.0	662.2
10°	657.8	658.3	658.5	658.8	659.0	659.3	659.3	659.5
12.5°	654.0	654.5	654.8	655.3	655.8	656.0	656.3	656.5
15°	648.5	649.5	650.0	650.3	651.3	651.8	652.0	652.3
17.5°	639.8	641.8	642.6	643.1	644.0	645.0	645.8	646.0
20°	627.3	629.6	630.6	631.8	633.3	634.6	635.1	635.6
22.5°	609.9	612.4	613.9	615.4	616.6	617.9	619.9	619.1
25°	585.0	589.2	590.9	591.7	594.4	595.9	596.9	595.9
27.5°	557.0	559.5	561.0	562.8	564.8	566.3	566.8	568.2
30°	523.4	527.6	527.4	529.1	531.6	533.1	533.6	534.8
32.5°	488.5	490.5	491.9	491.7	492.7	495.4	494.4	496.7
35°	451.3	451.6	454.0	453.8	455.8	455.8	455.8	457.3
37.5°	411.7	414.7	413.4	416.4	415.4	416.1	416.1	416.6
40°	375.5	376.5	376.5	377.5	378.3	377.5	378.0	379.2
42.5°	338.1	339.1	339.4	338.9	339.6	341.8	340.1	341.6
45°	303.2	303.9	304.9	304.2	305.4	304.7	305.4	304.9
47.5°	270.3	270.0	269.8	271.8	270.0	270.3	271.3	269.5
50°	236.6	238.1	237.1	237.9	238.4	238.4	237.6	237.6
52.5°	206.7	206.5	205.7	206.5	206.0	206.2	206.7	206.2
55°	175.8	176.8	176.3	176.0	176.3	176.3	177.8	175.8
57.5°	145.4	144.9	145.6	147.4	145.6	146.9	147.6	147.9
60°	116.4	116.4	117.9	117.2	118.7	119.9	120.9	120.4
62.5°	88.8	90.0	90.5	90.8	92.3	93.3	93.3	93.0
65°	65.8	67.6	67.6	68.6	69.1	69.1	69.6	70.6
67.5°	48.6	48.6	48.9	49.4	49.1	49.1	49.6	49.9
70°	33.9	33.4	34.2	33.9	33.9	33.7	33.9	33.9
72.5°	21.4	21.4	21.7	21.4	20.9	21.2	21.2	21.7
75°	11.5	12.0	11.5	11.5	11.7	11.2	11.5	11.7
77.5°	4.7	4.7	4.7	4.7	4.7	4.5	4.5	4.5
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)