

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: P856909

Luminaire Tested: **LX4C15D010 EX4C159027 4LBLWWH**

Issue Date: 2/14/2022



Test Information

Test Method: LM-79-08
Report Number: P856909
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-2)
Test Lab: INNOVATION CENTER
Issue Date: 2/14/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LX4C15D010 EX4C159027 4LBLWWH
Description: 4 INCH 1500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LRLWW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

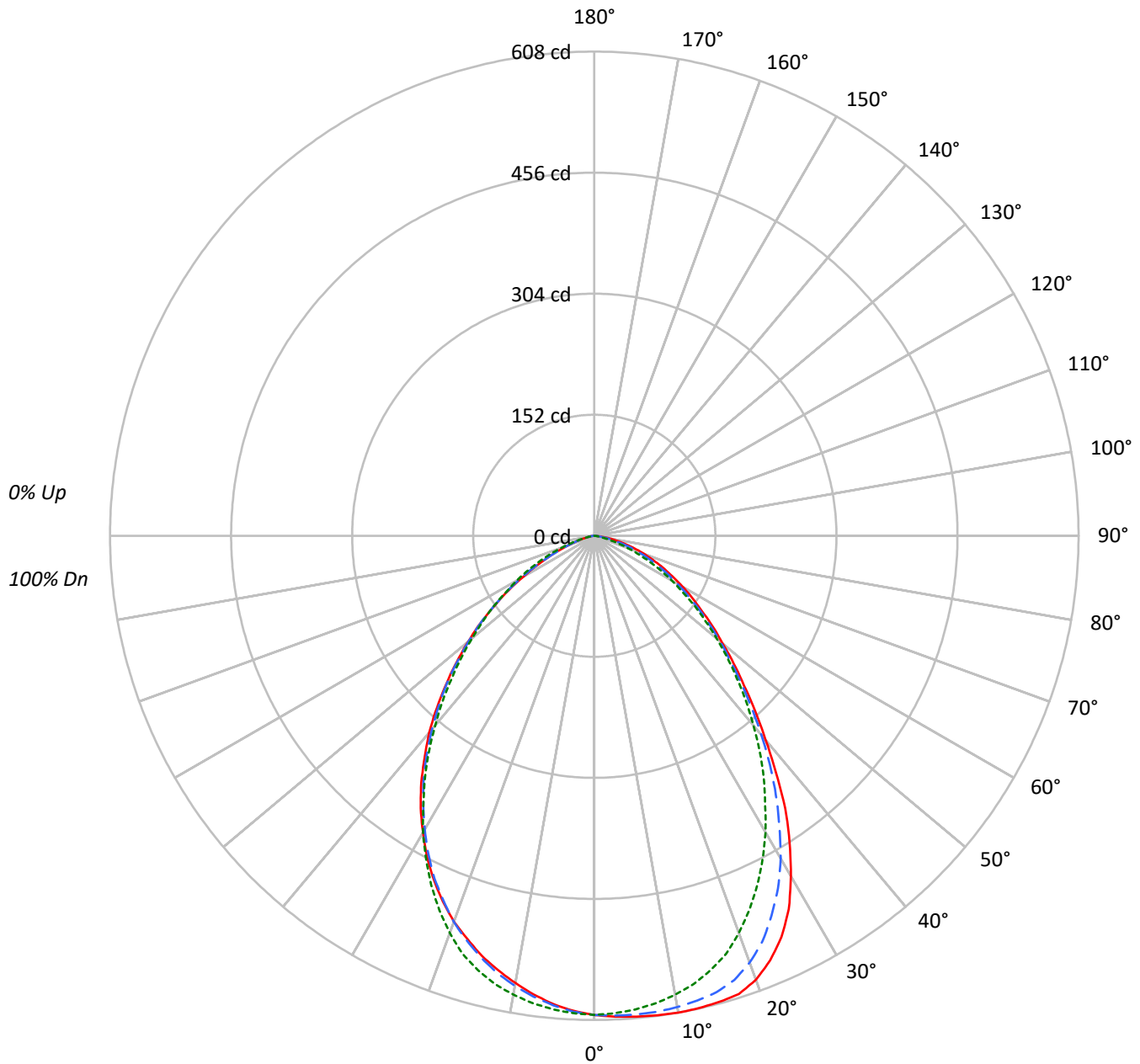
Lumens per Lamp: N/A
Luminaire Lumens: 1134.0 lumens
Efficiency: N/A
Efficacy: 71.8 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.09 / 1.17
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	111	107	104	101	108	105	102	99		101	98	96		97	95	93		94	92	90
2	103	96	90	86	100	94	89	85		91	86	83		88	84	81		85	82	79
3	95	86	79	74	93	85	78	73		82	76	72		79	75	71		77	73	70
4	88	78	70	64	86	77	69	64		74	68	63		72	67	62		70	65	62
5	82	71	63	57	80	69	62	57		67	61	56		66	60	55		64	59	55
6	76	64	56	51	74	63	56	50		62	55	50		60	54	50		59	53	49
7	71	59	51	46	69	58	51	45		57	50	45		55	49	45		54	49	44
8	67	54	47	41	65	54	46	41		52	46	41		51	45	41		50	45	40
9	62	50	43	38	61	50	42	37		48	42	37		47	41	37		47	41	37
10	59	47	39	34	58	46	39	34		45	39	34		44	38	34		43	38	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	73921	73921	73921
5°	74746	73611	72810
10°	75847	72990	71144
15°	77088	71823	69444
20°	77580	69383	67382
25°	75354	65635	64632
30°	70022	60999	61028
35°	62690	55611	56781
40°	53677	49844	51672
45°	46198	43956	45590
50°	40156	38263	39410
55°	35341	32921	32621
60°	31450	27470	25308
65°	27587	22006	18314
70°	23707	15553	12392
75°	19224	9019	7262
80°	13725	3962	3608
85°	5215	1692	1692



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.7	5.0
10°-20°	160.5	14.2
20°-30°	229.2	20.2
30°-40°	239.8	21.1
40°-50°	200.9	17.7
50°-60°	140.6	12.4
60°-70°	76.6	6.8
70°-80°	26.6	2.3
80°-90°	3.1	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°	446.5	39.4
0°-40°	686.3	60.5
0°-60°	1027.8	90.6
0°-90°	1134.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1134.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	602	602	602	602	602	
5°	606	603	597	592	590	58
15°	606	593	565	548	546	171
25°	556	526	484	475	477	254
35°	418	397	371	374	379	259
45°	266	260	253	261	262	207
55°	165	160	154	154	152	149
65°	95	87	76	64	63	95
75°	40	33	19	15	15	44
85°	4	2	1	1	1	7
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°	601.7	601.7	601.7	601.7	601.7	601.7	601.7	601.7	601.7	601.7	601.7
2.5°	604.5	603.8	604.0	604.0	604.0	603.8	604.0	603.8	603.8	603.6	603.1
5°	606.1	605.7	605.7	605.7	605.4	605.2	605.2	605.0	604.5	604.3	603.3
7.5°	607.3	606.8	606.8	606.6	606.4	606.1	605.9	605.2	604.5	604.0	602.9
10°	608.0	607.3	607.3	606.8	606.4	606.1	605.7	604.7	603.8	602.7	601.0
12.5°	607.5	606.8	606.6	606.1	605.2	604.7	604.3	603.1	601.5	599.9	597.8
15°	606.1	605.7	605.2	604.5	603.3	602.7	602.2	600.3	598.3	595.9	593.4
17.5°	603.3	602.7	601.7	600.8	599.2	598.5	597.3	595.0	592.0	588.8	584.8
20°	593.4	592.9	592.0	590.4	587.8	586.9	585.3	582.3	578.4	574.4	570.3
22.5°	577.0	576.3	574.9	573.5	571.2	569.6	568.2	564.0	559.6	555.4	551.5
25°	555.9	555.2	553.4	551.5	549.2	546.4	545.0	541.8	537.4	532.1	526.3
27.5°	528.8	526.5	525.8	523.7	520.3	519.3	517.3	513.1	508.9	504.3	499.4
30°	493.6	493.6	492.3	491.3	488.1	487.2	484.9	480.5	478.1	471.7	468.0
32.5°	456.4	455.9	454.8	454.1	452.2	450.6	448.3	446.0	440.9	437.6	432.5
35°	418.0	415.2	415.7	414.3	413.1	411.3	411.0	408.5	403.9	402.0	397.4
37.5°	374.2	373.1	374.7	372.6	371.5	371.7	369.8	368.2	366.4	363.1	362.2
40°	334.7	335.6	335.3	333.5	334.4	333.3	331.4	329.8	328.9	326.8	326.1
42.5°	299.2	297.9	297.4	297.4	297.6	297.6	296.7	295.5	295.5	293.5	291.4
45°	265.9	265.9	265.5	266.8	264.8	264.8	264.1	263.8	262.9	262.4	259.9
47.5°	237.2	237.0	236.8	236.5	236.3	236.3	234.9	233.7	233.5	232.1	230.7
50°	210.1	211.5	211.1	209.9	209.4	209.7	208.8	208.1	207.8	205.5	205.7
52.5°	187.5	187.2	187.7	187.0	185.8	186.1	185.1	184.2	183.3	182.1	181.2
55°	165.0	166.2	165.7	165.0	164.8	164.3	163.6	162.5	162.2	159.7	159.5
57.5°	146.3	146.0	145.6	144.4	144.2	143.5	143.5	142.6	141.2	139.8	138.6
60°	128.0	128.0	127.3	127.1	126.1	125.9	125.7	124.7	123.1	122.0	120.1
62.5°	110.4	110.9	110.4	109.7	109.0	108.1	107.6	106.9	105.5	104.4	102.8
65°	94.9	94.7	94.4	93.5	93.3	92.3	92.1	90.7	89.3	88.4	86.6
67.5°	80.1	79.4	79.4	78.9	78.5	77.8	77.3	75.9	74.3	73.4	71.5
70°	66.0	65.5	65.5	65.5	64.3	63.6	63.4	62.7	60.4	59.5	57.6
72.5°	53.0	52.8	52.5	51.8	51.1	51.1	50.2	48.8	47.7	46.5	45.1
75°	40.5	41.0	40.5	39.6	39.3	38.9	38.2	37.0	35.9	34.5	32.9
77.5°	29.6	29.2	28.7	28.7	28.2	27.3	27.1	26.2	24.8	23.8	22.2
80°	19.4	19.2	18.7	18.3	18.1	17.8	17.6	16.7	15.3	14.6	13.2
82.5°	10.6	10.4	10.4	10.2	9.5	9.5	9.3	8.3	7.6	7.2	6.5
85°	3.7	3.7	3.7	3.5	3.5	3.5	3.2	3.0	2.8	2.5	2.1
87.5°	0.5	0.2	0.5	0.2	0.5	0.2	0.2	0.2	0.2	0.2	0.2
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°	601.7	601.7	601.7	601.7	601.7	601.7	601.7	601.7	601.7	601.7	601.7
2.5°	602.7	602.2	602.0	601.7	601.5	601.3	601.0	600.6	600.3	600.1	599.6
5°	602.7	601.7	601.3	600.6	600.1	599.6	599.0	598.3	597.6	596.9	596.2
7.5°	601.7	600.3	599.4	598.0	597.6	596.9	595.5	594.6	593.4	592.0	590.4
10°	599.4	597.8	595.9	594.1	593.4	592.2	590.4	588.8	586.9	585.1	583.4
12.5°	595.7	593.2	590.9	588.3	586.9	585.8	583.2	580.9	578.6	576.5	573.7
15°	590.2	587.1	584.1	580.7	579.0	577.7	574.0	571.2	567.5	564.7	561.9
17.5°	581.1	576.5	572.8	568.4	566.1	564.5	561.2	556.8	553.4	550.3	547.1
20°	565.6	561.2	556.1	551.3	548.7	546.6	542.0	537.4	533.9	530.7	527.2
22.5°	545.3	539.7	536.0	530.0	527.9	525.4	519.8	515.6	511.7	508.5	505.2
25°	520.5	515.6	510.5	505.0	502.4	499.4	494.8	490.4	487.9	484.2	480.2
27.5°	492.0	488.1	481.8	477.0	474.4	472.1	467.7	463.8	460.1	457.5	453.8
30°	461.9	457.3	451.8	446.7	445.3	442.5	438.6	435.6	431.6	430.0	428.4
32.5°	428.8	423.5	419.4	416.1	413.3	411.0	408.9	404.1	403.4	399.2	398.8
35°	392.7	390.4	386.5	383.7	381.4	379.8	376.3	374.0	371.5	370.8	369.1
37.5°	358.7	355.9	352.2	349.7	348.1	347.8	345.3	343.9	342.1	341.1	339.3
40°	323.1	321.9	318.7	318.2	315.7	315.4	314.1	312.4	310.8	310.8	311.0
42.5°	290.2	288.8	287.4	285.8	284.4	284.4	283.7	283.3	282.8	282.1	283.3
45°	259.4	257.6	256.7	255.0	255.7	254.3	253.9	253.9	253.2	253.0	254.6
47.5°	230.7	228.7	227.7	227.3	227.3	227.5	225.4	226.1	225.9	226.3	227.0
50°	204.6	202.7	201.3	201.3	201.6	200.7	199.7	200.4	199.7	200.2	201.8
52.5°	180.3	178.4	177.7	177.7	176.4	176.1	176.6	175.7	175.9	176.1	177.0
55°	157.8	156.7	155.5	154.4	154.6	154.1	153.2	153.0	153.4	153.7	154.8
57.5°	137.7	136.1	134.5	134.0	133.5	133.5	132.4	132.1	132.6	131.5	131.5
60°	118.5	117.6	115.5	114.8	114.8	113.6	112.7	113.2	112.0	111.8	112.0
62.5°	100.7	100.0	98.6	97.2	96.7	96.3	95.1	94.7	94.2	93.3	91.9
65°	85.2	83.5	81.9	81.0	80.3	79.2	78.5	77.5	76.1	75.7	74.3
67.5°	69.7	68.0	66.4	65.7	65.0	64.3	63.2	62.0	60.4	58.6	56.9
70°	56.0	53.9	53.0	51.1	50.7	49.8	48.1	47.0	45.4	43.3	41.7
72.5°	42.8	41.4	40.0	38.4	37.3	36.6	35.2	33.3	31.5	30.3	28.7
75°	30.8	30.1	28.2	26.4	25.9	25.0	23.4	22.2	20.8	19.0	17.6
77.5°	20.8	19.4	18.3	16.7	16.2	15.3	14.3	13.2	12.3	11.1	10.2
80°	12.3	11.1	10.4	9.3	8.8	8.3	7.6	6.7	6.0	5.6	5.3
82.5°	6.0	5.1	4.9	4.2	3.9	3.7	3.2	3.0	2.5	2.5	2.5
85°	2.1	1.6	1.6	1.4	1.2	1.2	1.2	1.2	1.2	1.2	1.2
87.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.2
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°	601.7	601.7	601.7	601.7	601.7	601.7	601.7	601.7	601.7	601.7	601.7
2.5°	599.4	599.2	599.0	598.7	598.7	598.5	598.5	598.3	598.3	598.0	598.0
5°	595.2	594.6	594.1	593.6	593.6	592.9	592.5	592.0	591.8	591.8	591.3
7.5°	589.5	588.5	587.6	586.9	586.7	585.5	584.6	584.6	583.7	583.2	582.8
10°	581.8	580.2	578.8	578.1	577.2	576.5	575.3	574.7	574.0	572.8	572.6
12.5°	571.4	570.3	568.2	567.2	566.8	565.4	563.5	562.6	562.4	561.5	560.8
15°	559.6	557.1	555.2	554.1	554.1	551.7	550.8	549.4	548.5	547.8	547.6
17.5°	544.3	541.8	539.9	538.3	537.9	536.0	534.6	534.1	533.0	533.5	532.3
20°	524.7	522.6	521.2	519.1	519.1	517.9	517.5	516.3	515.9	515.4	515.9
22.5°	503.6	501.1	498.7	498.5	498.5	496.9	496.7	496.4	495.5	496.2	496.0
25°	478.8	477.0	475.6	475.4	475.4	474.4	473.5	474.0	474.7	474.4	475.1
27.5°	453.1	451.3	450.8	450.6	450.1	449.9	450.4	450.4	451.1	452.0	452.9
30°	425.4	424.9	424.2	424.0	423.5	424.7	425.1	425.8	425.6	427.0	427.9
32.5°	397.6	396.7	396.4	396.9	397.6	397.4	398.8	399.2	399.7	401.3	402.0
35°	369.6	369.4	368.9	368.9	369.1	371.0	371.0	372.6	373.5	374.0	375.8
37.5°	339.5	340.4	340.9	341.6	341.8	342.5	343.0	344.6	345.5	346.5	347.4
40°	312.0	311.5	313.6	312.2	312.7	314.8	315.7	315.4	316.8	318.2	319.1
42.5°	282.6	283.3	283.7	284.2	285.4	285.6	286.7	288.4	288.8	290.4	290.9
45°	254.1	254.3	255.3	256.2	256.9	258.7	259.2	259.9	261.3	261.3	262.0
47.5°	227.3	228.2	228.2	229.6	230.7	230.5	232.1	232.6	232.4	233.5	234.0
50°	201.6	203.0	202.7	203.7	204.1	204.4	205.7	206.2	205.3	206.4	206.7
52.5°	177.0	177.7	178.7	178.9	178.4	179.6	179.1	180.1	179.8	180.7	179.8
55°	154.6	154.4	154.4	154.8	154.4	154.8	155.3	154.4	153.7	154.6	154.4
57.5°	132.1	132.1	131.7	132.4	131.7	131.0	130.8	130.1	129.4	129.4	129.1
60°	111.1	110.6	109.7	109.5	109.5	108.3	107.8	106.9	106.9	106.0	105.1
62.5°	91.4	90.3	89.6	89.6	89.1	87.9	85.9	84.5	84.0	82.6	82.4
65°	72.9	71.7	71.1	69.7	68.5	68.0	66.0	64.3	63.6	62.3	62.5
67.5°	56.0	54.2	52.1	51.1	50.5	48.8	48.1	47.0	46.3	46.3	46.3
70°	40.3	38.6	36.6	35.9	35.4	34.0	33.3	33.1	33.8	33.6	33.8
72.5°	27.1	25.5	24.5	24.1	23.6	22.9	23.4	23.6	23.1	23.4	23.6
75°	16.4	16.0	15.3	15.0	15.0	15.3	15.0	15.0	15.3	15.3	15.5
77.5°	9.5	9.0	9.0	8.8	9.3	9.0	9.0	9.0	9.3	9.3	9.3
80°	5.1	5.1	5.1	5.1	5.3	5.1	5.3	5.3	5.3	5.3	5.3
82.5°	2.5	2.5	2.5	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.5
85°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
87.5°	0.2	0.5	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2	0.2
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):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	601.7	601.7	601.7	601.7	601.7	601.7	601.7	601.7
2.5°	597.6	597.6	597.6	597.1	597.3	597.3	597.1	597.1
5°	591.1	590.9	590.4	590.4	589.9	590.4	590.2	590.4
7.5°	582.3	582.3	581.6	581.6	581.4	581.1	580.9	581.1
10°	571.9	571.9	571.4	571.2	571.4	570.5	570.5	570.3
12.5°	560.3	559.8	559.4	559.6	559.4	558.7	558.4	558.7
15°	546.9	546.2	546.4	545.7	545.7	545.5	546.0	546.0
17.5°	532.1	531.6	531.1	531.4	530.9	531.1	530.9	530.7
20°	515.6	515.4	515.4	514.5	514.7	514.5	514.7	515.4
22.5°	496.7	496.4	496.7	496.0	496.4	496.4	497.1	497.1
25°	475.8	475.6	476.1	476.3	476.5	477.2	476.5	476.8
27.5°	452.7	453.4	454.1	454.3	455.2	454.5	454.1	454.8
30°	429.3	429.3	429.1	430.0	430.7	431.4	430.2	430.2
32.5°	402.5	403.6	403.6	403.9	404.5	404.5	404.5	405.5
35°	376.8	377.5	377.7	376.8	377.2	377.0	378.6	378.6
37.5°	348.1	348.1	348.3	349.9	349.9	349.2	349.7	349.7
40°	320.8	321.0	320.1	320.5	321.7	321.2	321.7	322.2
42.5°	290.9	292.5	291.6	292.1	291.8	292.1	292.3	292.3
45°	262.4	262.9	262.9	263.1	263.6	264.1	262.7	262.4
47.5°	234.7	234.9	235.6	234.4	235.8	234.4	235.8	234.2
50°	206.7	207.6	206.9	207.4	206.7	206.7	206.4	206.2
52.5°	180.1	179.8	179.8	179.6	179.6	180.1	179.6	180.3
55°	153.4	153.7	153.2	153.0	152.7	153.4	152.7	152.3
57.5°	128.2	128.7	127.8	128.2	126.6	127.3	127.5	127.8
60°	104.8	104.1	104.1	103.2	103.2	103.9	103.0	103.0
62.5°	81.2	81.7	81.0	81.9	81.9	82.9	82.4	82.9
65°	62.3	62.5	62.7	62.7	62.7	64.1	63.6	63.0
67.5°	47.0	47.2	47.4	47.2	47.9	47.4	47.4	47.7
70°	34.0	34.3	34.5	34.5	34.3	34.5	34.5	34.5
72.5°	23.6	23.8	23.6	23.8	24.1	23.8	23.8	24.1
75°	15.5	15.5	15.3	15.3	15.3	15.3	15.5	15.3
77.5°	9.0	9.3	9.0	9.3	9.3	9.3	9.3	9.3
80°	5.3	5.3	5.3	5.1	5.3	5.3	5.3	5.1
82.5°	2.8	2.8	2.5	2.5	2.8	2.8	2.8	2.8
85°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
87.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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)