

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: P856932

Luminaire Tested: **LX4C15D010 EX4C159030 4LBLWWH**

Issue Date: 2/14/2022



Test Information

Test Method: LM-79-08
Report Number: P856932
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 EX4C159030 4LBLWWH
Description: 4 INCH 1500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LRLWW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

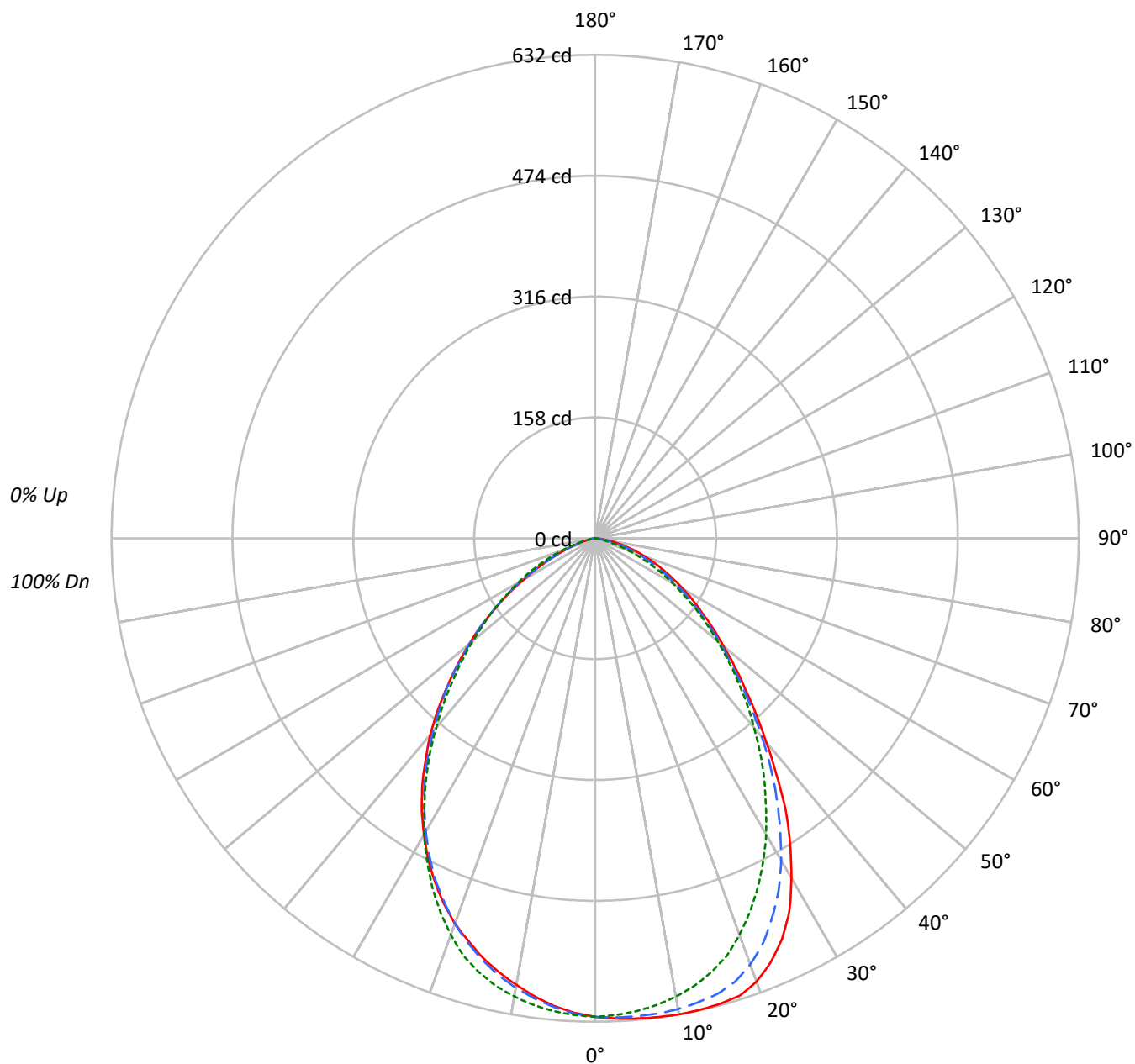
Lumens per Lamp: N/A
Luminaire Lumens: 1179.0 lumens
Efficiency: N/A
Efficacy: 74.6 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.09 / 1.17
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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	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	108	105	102	99	101	98	96	97	95	93	94	92	90	88		
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77		
3	95	86	79	74	93	85	78	73	82	76	72	79	75	71	77	73	70	68		
4	88	78	70	64	86	77	69	64	74	68	63	72	67	62	70	65	62	60		
5	82	71	63	57	80	69	62	57	67	61	56	66	60	55	64	59	55	53		
6	76	64	56	51	74	63	56	50	62	55	50	60	54	50	59	53	49	47		
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43		
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	40	39		
9	62	50	43	38	61	50	42	37	49	42	37	47	41	37	47	41	37	35		
10	59	47	39	34	58	46	39	34	45	39	34	44	38	34	43	38	34	32		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	76857	76857	76857
5°	77718	76534	75696
10°	78854	75885	73963
15°	80153	74672	72191
20°	80652	72128	70062
25°	78350	68238	67194
30°	72802	63425	63454
35°	65180	57816	59046
40°	55794	51817	53709
45°	48039	45694	47414
50°	41761	39773	40977
55°	36755	34227	33906
60°	32704	28551	26315
65°	28692	22878	19012
70°	24641	16164	12895
75°	19984	9351	7547
80°	14291	4103	3750
85°	5356	1692	1692



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.0	5.0
10°-20°	166.9	14.2
20°-30°	238.3	20.2
30°-40°	249.3	21.1
40°-50°	208.9	17.7
50°-60°	146.2	12.4
60°-70°	79.6	6.8
70°-80°	27.6	2.3
80°-90°	3.2	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°	464.2	39.4
0°-40°	713.5	60.5
0°-60°	1068.6	90.6
0°-90°	1179.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1179.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	626	626	626	626	626	
5°	630	627	621	615	614	60
15°	630	617	587	570	568	178
25°	578	547	503	494	496	264
35°	435	413	386	388	394	269
45°	276	270	263	272	273	215
55°	172	166	160	160	158	155
65°	99	90	79	66	65	98
75°	42	34	20	16	16	45
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°	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6
2.5°	628.5	627.8	628.0	628.0	628.0	627.8	628.0	627.8	627.8	627.5	627.0
5°	630.2	629.7	629.7	629.7	629.5	629.2	629.2	629.0	628.5	628.3	627.3
7.5°	631.4	630.9	630.9	630.7	630.4	630.2	629.9	629.2	628.5	628.0	626.8
10°	632.1	631.4	631.4	630.9	630.4	630.2	629.7	628.7	627.8	626.6	624.9
12.5°	631.6	630.9	630.7	630.2	629.2	628.7	628.3	627.0	625.4	623.7	621.5
15°	630.2	629.7	629.2	628.5	627.3	626.6	626.1	624.2	622.0	619.6	616.9
17.5°	627.3	626.6	625.6	624.6	623.0	622.2	621.0	618.6	615.5	612.1	608.0
20°	616.9	616.5	615.5	613.8	611.2	610.2	608.5	605.4	601.3	597.2	592.9
22.5°	599.9	599.1	597.7	596.3	593.8	592.2	590.7	586.4	581.8	577.5	573.4
25°	578.0	577.2	575.3	573.4	571.0	568.1	566.7	563.3	558.7	553.2	547.2
27.5°	549.8	547.4	546.7	544.5	540.9	539.9	537.8	533.4	529.1	524.3	519.3
30°	513.2	513.2	511.8	510.8	507.5	506.5	504.1	499.5	497.1	490.4	486.5
32.5°	474.5	474.0	472.8	472.1	470.2	468.5	466.1	463.7	458.4	455.0	449.7
35°	434.6	431.7	432.1	430.7	429.5	427.6	427.3	424.7	419.9	418.0	413.1
37.5°	389.1	387.9	389.6	387.4	386.2	386.4	384.5	382.8	380.9	377.5	376.6
40°	347.9	348.9	348.7	346.7	347.7	346.5	344.6	342.9	341.9	339.8	339.0
42.5°	311.1	309.7	309.2	309.2	309.4	309.4	308.5	307.3	307.3	305.1	302.9
45°	276.5	276.5	276.0	277.4	275.3	275.3	274.5	274.3	273.3	272.9	270.2
47.5°	246.6	246.4	246.2	245.9	245.7	245.7	244.2	243.0	242.8	241.3	239.9
50°	218.5	219.9	219.4	218.2	217.8	218.0	217.0	216.3	216.1	213.7	213.9
52.5°	194.9	194.7	195.1	194.4	193.2	193.5	192.5	191.5	190.6	189.4	188.4
55°	171.6	172.8	172.3	171.6	171.3	170.8	170.1	168.9	168.7	166.0	165.8
57.5°	152.1	151.8	151.3	150.1	149.9	149.2	149.2	148.2	146.8	145.3	144.1
60°	133.1	133.1	132.3	132.1	131.1	130.9	130.7	129.7	128.0	126.8	124.9
62.5°	114.8	115.3	114.8	114.1	113.3	112.4	111.9	111.2	109.7	108.5	106.8
65°	98.7	98.4	98.2	97.2	97.0	96.0	95.8	94.3	92.9	91.9	90.0
67.5°	83.3	82.5	82.5	82.1	81.6	80.8	80.4	78.9	77.2	76.3	74.4
70°	68.6	68.1	68.1	68.1	66.9	66.2	65.9	65.2	62.8	61.8	59.9
72.5°	55.1	54.9	54.6	53.9	53.2	53.2	52.2	50.8	49.6	48.4	46.9
75°	42.1	42.6	42.1	41.1	40.9	40.4	39.7	38.5	37.3	35.9	34.2
77.5°	30.8	30.3	29.8	29.8	29.4	28.4	28.2	27.2	25.7	24.8	23.1
80°	20.2	20.0	19.5	19.0	18.8	18.5	18.3	17.3	15.9	15.2	13.7
82.5°	11.1	10.8	10.8	10.6	9.9	9.9	9.6	8.7	7.9	7.5	6.7
85°	3.8	3.8	3.8	3.6	3.6	3.6	3.4	3.1	2.9	2.6	2.2
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°	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6
2.5°	626.6	626.1	625.8	625.6	625.4	625.1	624.9	624.4	624.2	623.9	623.4
5°	626.6	625.6	625.1	624.4	623.9	623.4	622.7	622.0	621.3	620.6	619.8
7.5°	625.6	624.2	623.2	621.8	621.3	620.6	619.1	618.1	616.9	615.5	613.8
10°	623.2	621.5	619.6	617.7	616.9	615.7	613.8	612.1	610.2	608.3	606.6
12.5°	619.4	616.7	614.3	611.7	610.2	609.0	606.4	604.0	601.5	599.4	596.5
15°	613.6	610.4	607.3	603.7	602.0	600.6	596.7	593.8	590.0	587.1	584.2
17.5°	604.2	599.4	595.5	591.0	588.6	586.9	583.5	578.9	575.3	572.2	568.8
20°	588.1	583.5	578.2	573.2	570.5	568.3	563.5	558.7	555.1	551.7	548.1
22.5°	566.9	561.1	557.3	551.0	548.8	546.2	540.4	536.1	532.0	528.6	525.3
25°	541.1	536.1	530.8	525.0	522.4	519.3	514.4	509.9	507.2	503.4	499.3
27.5°	511.6	507.5	501.0	495.9	493.3	490.9	486.3	482.2	478.3	475.7	471.9
30°	480.3	475.5	469.7	464.4	462.9	460.1	456.0	452.8	448.8	447.1	445.4
32.5°	445.9	440.3	436.0	432.6	429.7	427.3	425.2	420.1	419.4	415.1	414.6
35°	408.3	405.9	401.8	398.9	396.5	394.9	391.2	388.8	386.2	385.5	383.8
37.5°	373.0	370.1	366.2	363.6	361.9	361.6	359.0	357.6	355.6	354.7	352.7
40°	335.9	334.7	331.3	330.8	328.2	328.0	326.5	324.8	323.1	323.1	323.4
42.5°	301.7	300.3	298.8	297.2	295.7	295.7	295.0	294.5	294.0	293.3	294.5
45°	269.7	267.8	266.8	265.2	265.9	264.4	264.0	264.0	263.2	263.0	264.7
47.5°	239.9	237.7	236.8	236.3	236.3	236.5	234.4	235.1	234.8	235.3	236.0
50°	212.7	210.8	209.3	209.3	209.6	208.6	207.7	208.4	207.7	208.1	209.8
52.5°	187.4	185.5	184.8	184.8	183.4	183.1	183.6	182.6	182.9	183.1	184.1
55°	164.1	162.9	161.7	160.5	160.7	160.3	159.3	159.0	159.5	159.8	161.0
57.5°	143.2	141.5	139.8	139.3	138.8	138.8	137.6	137.4	137.9	136.7	136.7
60°	123.2	122.2	120.1	119.3	119.3	118.1	117.2	117.7	116.5	116.2	116.5
62.5°	104.7	103.9	102.5	101.1	100.6	100.1	98.9	98.4	97.9	97.0	95.5
65°	88.5	86.9	85.2	84.2	83.5	82.3	81.6	80.6	79.2	78.7	77.2
67.5°	72.4	70.7	69.1	68.3	67.6	66.9	65.7	64.5	62.8	60.9	59.2
70°	58.2	56.1	55.1	53.2	52.7	51.7	50.0	48.8	47.2	45.0	43.3
72.5°	44.5	43.1	41.6	39.9	38.7	38.0	36.6	34.6	32.7	31.5	29.8
75°	32.0	31.3	29.4	27.4	26.9	26.0	24.3	23.1	21.7	19.7	18.3
77.5°	21.7	20.2	19.0	17.3	16.8	15.9	14.9	13.7	12.8	11.5	10.6
80°	12.8	11.5	10.8	9.6	9.1	8.7	7.9	7.0	6.3	5.8	5.5
82.5°	6.3	5.3	5.1	4.3	4.1	3.8	3.4	3.1	2.6	2.6	2.6
85°	2.2	1.7	1.7	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°	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6
2.5°	623.2	623.0	622.7	622.5	622.5	622.2	622.2	622.0	622.0	621.8	621.8
5°	618.9	618.1	617.7	617.2	617.2	616.5	616.0	615.5	615.3	615.3	614.8
7.5°	612.9	611.9	610.9	610.2	610.0	608.8	607.8	607.8	606.8	606.4	605.9
10°	604.9	603.2	601.8	601.1	600.1	599.4	598.2	597.5	596.7	595.5	595.3
12.5°	594.1	592.9	590.7	589.8	589.3	587.8	585.9	584.9	584.7	583.7	583.0
15°	581.8	579.2	577.2	576.0	576.0	573.6	572.7	571.2	570.3	569.5	569.3
17.5°	565.9	563.3	561.4	559.7	559.2	557.3	555.8	555.3	554.1	554.6	553.4
20°	545.5	543.3	541.9	539.7	539.7	538.5	538.0	536.8	536.3	535.9	536.3
22.5°	523.6	520.9	518.5	518.3	518.3	516.6	516.4	516.1	515.2	515.9	515.6
25°	497.8	495.9	494.5	494.2	494.2	493.3	492.3	492.8	493.5	493.3	494.0
27.5°	471.1	469.2	468.7	468.5	468.0	467.8	468.2	468.2	469.0	469.9	470.9
30°	442.3	441.8	441.1	440.8	440.3	441.5	442.0	442.7	442.5	443.9	444.9
32.5°	413.4	412.4	412.2	412.7	413.4	413.1	414.6	415.1	415.5	417.2	418.0
35°	384.3	384.0	383.5	383.5	383.8	385.7	385.7	387.4	388.4	388.8	390.8
37.5°	353.0	353.9	354.4	355.2	355.4	356.1	356.6	358.3	359.2	360.2	361.2
40°	324.4	323.9	326.0	324.6	325.1	327.2	328.2	328.0	329.4	330.8	331.8
42.5°	293.8	294.5	295.0	295.5	296.7	296.9	298.1	299.8	300.3	302.0	302.5
45°	264.2	264.4	265.4	266.4	267.1	269.0	269.5	270.2	271.7	271.7	272.4
47.5°	236.3	237.2	237.2	238.7	239.9	239.7	241.3	241.8	241.6	242.8	243.3
50°	209.6	211.0	210.8	211.7	212.2	212.5	213.9	214.4	213.4	214.6	214.9
52.5°	184.1	184.8	185.8	186.0	185.5	186.7	186.2	187.2	187.0	187.9	187.0
55°	160.7	160.5	160.5	161.0	160.5	161.0	161.5	160.5	159.8	160.7	160.5
57.5°	137.4	137.4	136.9	137.6	136.9	136.2	135.9	135.2	134.5	134.5	134.3
60°	115.5	115.0	114.1	113.8	113.8	112.6	112.1	111.2	111.2	110.2	109.2
62.5°	95.0	93.8	93.1	93.1	92.6	91.4	89.3	87.8	87.3	85.9	85.7
65°	75.8	74.6	73.9	72.4	71.2	70.7	68.6	66.9	66.2	64.7	65.0
67.5°	58.2	56.3	54.1	53.2	52.5	50.8	50.0	48.8	48.1	48.1	48.1
70°	41.9	40.2	38.0	37.3	36.8	35.4	34.6	34.4	35.1	34.9	35.1
72.5°	28.2	26.5	25.5	25.0	24.5	23.8	24.3	24.5	24.1	24.3	24.5
75°	17.1	16.6	15.9	15.6	15.6	15.9	15.6	15.6	15.9	15.9	16.1
77.5°	9.9	9.4	9.4	9.1	9.6	9.4	9.4	9.4	9.6	9.6	9.6
80°	5.3	5.3	5.3	5.3	5.5	5.3	5.5	5.5	5.5	5.5	5.5
82.5°	2.6	2.6	2.6	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.6
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°	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6
2.5°	621.3	621.3	621.3	620.8	621.0	621.0	620.8	620.8
5°	614.5	614.3	613.8	613.8	613.3	613.8	613.6	613.8
7.5°	605.4	605.4	604.7	604.7	604.4	604.2	604.0	604.2
10°	594.6	594.6	594.1	593.8	594.1	593.1	593.1	592.9
12.5°	582.5	582.1	581.6	581.8	581.6	580.9	580.6	580.9
15°	568.6	567.9	568.1	567.4	567.4	567.1	567.6	567.6
17.5°	553.2	552.7	552.2	552.5	552.0	552.2	552.0	551.7
20°	536.1	535.9	535.9	534.9	535.1	534.9	535.1	535.9
22.5°	516.4	516.1	516.4	515.6	516.1	516.1	516.8	516.8
25°	494.7	494.5	495.0	495.2	495.4	496.2	495.4	495.7
27.5°	470.6	471.4	472.1	472.3	473.3	472.6	472.1	472.8
30°	446.3	446.3	446.1	447.1	447.8	448.5	447.3	447.3
32.5°	418.4	419.6	419.6	419.9	420.6	420.6	420.6	421.6
35°	391.7	392.4	392.7	391.7	392.2	392.0	393.7	393.7
37.5°	361.9	361.9	362.1	363.8	363.8	363.1	363.6	363.6
40°	333.5	333.7	332.8	333.3	334.5	334.0	334.5	334.9
42.5°	302.5	304.1	303.2	303.7	303.4	303.7	303.9	303.9
45°	272.9	273.3	273.3	273.6	274.1	274.5	273.1	272.9
47.5°	244.0	244.2	244.9	243.7	245.2	243.7	245.2	243.5
50°	214.9	215.8	215.1	215.6	214.9	214.9	214.6	214.4
52.5°	187.2	187.0	187.0	186.7	186.7	187.2	186.7	187.4
55°	159.5	159.8	159.3	159.0	158.8	159.5	158.8	158.3
57.5°	133.3	133.8	132.8	133.3	131.6	132.3	132.6	132.8
60°	109.0	108.3	108.3	107.3	107.3	108.0	107.1	107.1
62.5°	84.5	84.9	84.2	85.2	85.2	86.1	85.7	86.1
65°	64.7	65.0	65.2	65.2	65.2	66.7	66.2	65.4
67.5°	48.8	49.1	49.3	49.1	49.8	49.3	49.3	49.6
70°	35.4	35.6	35.9	35.9	35.6	35.9	35.9	35.9
72.5°	24.5	24.8	24.5	24.8	25.0	24.8	24.8	25.0
75°	16.1	16.1	15.9	15.9	15.9	15.9	16.1	15.9
77.5°	9.4	9.6	9.4	9.6	9.6	9.6	9.6	9.6
80°	5.5	5.5	5.5	5.3	5.5	5.5	5.5	5.3
82.5°	2.9	2.9	2.6	2.6	2.9	2.9	2.9	2.9
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)