

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: P856955

Luminaire Tested: **LX4C15D010 EX4C159035 4LBLWWH**

Issue Date: 2/14/2022



Test Information

Test Method: LM-79-08
Report Number: P856955
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 EX4C159035 4LBLWWH
Description: 4 INCH 1500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS
AND 4LRLWW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

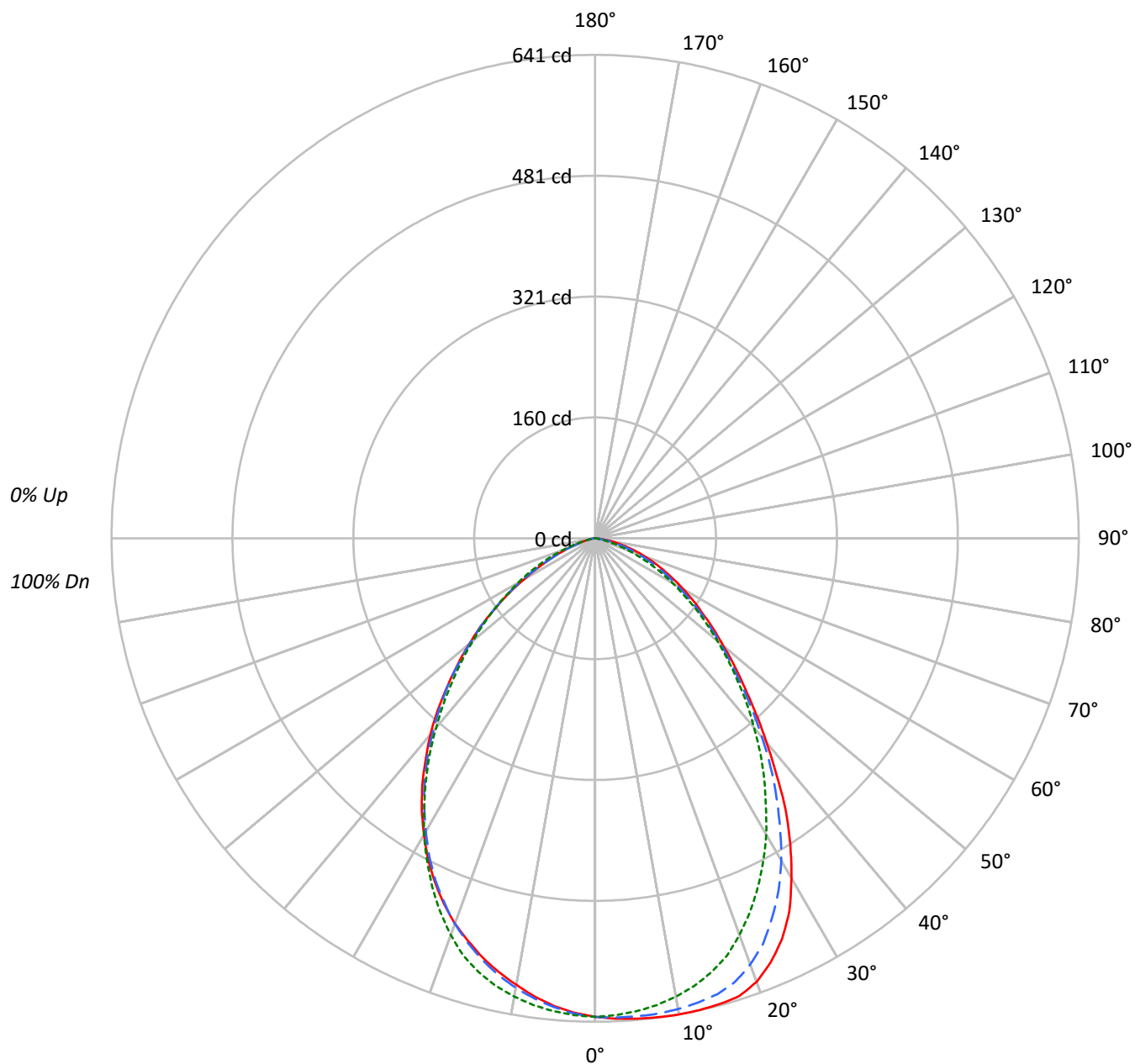
Lumens per Lamp: N/A
Luminaire Lumens: 1196.0 lumens
Efficiency: N/A
Efficacy: 75.7 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.09 / 1.17
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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°	77963	77963	77963
5°	78840	77632	76793
10°	79989	76982	75024
15°	81311	75753	73234
20°	81816	73174	71069
25°	79475	69214	68156
30°	73852	64333	64376
35°	66110	58641	59886
40°	56612	52571	54495
45°	48734	46354	48092
50°	42354	40347	41570
55°	37269	34720	34399
60°	33170	28969	26684
65°	29099	23198	19302
70°	25000	16379	13075
75°	20268	9493	7642
80°	14503	4174	3820
85°	5497	1692	1692



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.8	5.0
10°-20°	169.3	14.2
20°-30°	241.8	20.2
30°-40°	252.9	21.1
40°-50°	211.9	17.7
50°-60°	148.3	12.4
60°-70°	80.8	6.8
70°-80°	28.0	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°	470.9	39.4
0°-40°	723.8	60.5
0°-60°	1084.0	90.6
0°-90°	1196.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1196.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	635	635	635	635	635	
5°	639	636	630	624	623	61
15°	639	626	596	578	576	181
25°	586	555	511	501	503	268
35°	441	419	391	394	399	273
45°	280	274	267	276	277	218
55°	174	168	162	162	161	157
65°	100	91	80	67	66	100
75°	43	35	20	16	16	46
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°	634.6	634.6	634.6	634.6	634.6	634.6	634.6	634.6	634.6	634.6	634.6
2.5°	637.6	636.8	637.1	637.1	637.1	636.8	637.1	636.8	636.8	636.6	636.1
5°	639.3	638.8	638.8	638.8	638.5	638.3	638.3	638.0	637.6	637.3	636.3
7.5°	640.5	640.0	640.0	639.8	639.5	639.3	639.0	638.3	637.6	637.1	635.8
10°	641.2	640.5	640.5	640.0	639.5	639.3	638.8	637.8	636.8	635.6	633.9
12.5°	640.7	640.0	639.8	639.3	638.3	637.8	637.3	636.1	634.4	632.7	630.5
15°	639.3	638.8	638.3	637.6	636.3	635.6	635.1	633.2	631.0	628.5	625.8
17.5°	636.3	635.6	634.6	633.7	631.9	631.2	630.0	627.5	624.4	621.0	616.8
20°	625.8	625.4	624.4	622.7	620.0	619.0	617.3	614.1	610.0	605.8	601.4
22.5°	608.5	607.8	606.3	604.8	602.4	600.7	599.2	594.8	590.2	585.8	581.7
25°	586.3	585.6	583.6	581.7	579.2	576.3	574.8	571.4	566.8	561.2	555.1
27.5°	557.7	555.3	554.6	552.4	548.7	547.7	545.5	541.1	536.7	531.9	526.7
30°	520.6	520.6	519.2	518.2	514.8	513.8	511.4	506.7	504.3	497.4	493.5
32.5°	481.3	480.9	479.6	478.9	476.9	475.2	472.8	470.4	465.0	461.6	456.2
35°	440.8	437.9	438.4	436.9	435.7	433.7	433.5	430.8	425.9	424.0	419.1
37.5°	394.7	393.5	395.2	393.0	391.8	392.0	390.1	388.3	386.4	383.0	382.0
40°	353.0	353.9	353.7	351.7	352.7	351.5	349.5	347.8	346.8	344.7	343.9
42.5°	315.6	314.1	313.7	313.7	313.9	313.9	312.9	311.7	311.7	309.5	307.3
45°	280.5	280.5	280.0	281.4	279.2	279.2	278.5	278.3	277.3	276.8	274.1
47.5°	250.2	249.9	249.7	249.5	249.2	249.2	247.7	246.5	246.3	244.8	243.4
50°	221.6	223.1	222.6	221.4	220.9	221.1	220.2	219.4	219.2	216.7	217.0
52.5°	197.7	197.5	198.0	197.2	196.0	196.2	195.3	194.3	193.3	192.1	191.1
55°	174.0	175.3	174.8	174.0	173.8	173.3	172.6	171.3	171.1	168.4	168.2
57.5°	154.3	154.0	153.5	152.3	152.1	151.3	151.3	150.4	148.9	147.4	146.2
60°	135.0	135.0	134.2	134.0	133.0	132.8	132.5	131.6	129.9	128.6	126.7
62.5°	116.4	116.9	116.4	115.7	115.0	114.0	113.5	112.8	111.3	110.1	108.4
65°	100.1	99.8	99.6	98.6	98.4	97.4	97.1	95.7	94.2	93.2	91.3
67.5°	84.5	83.7	83.7	83.2	82.7	82.0	81.5	80.1	78.4	77.4	75.4
70°	69.6	69.1	69.1	69.1	67.9	67.1	66.9	66.1	63.7	62.7	60.8
72.5°	55.9	55.7	55.4	54.7	53.9	53.9	53.0	51.5	50.3	49.1	47.6
75°	42.7	43.2	42.7	41.7	41.5	41.0	40.3	39.1	37.8	36.4	34.7
77.5°	31.2	30.8	30.3	30.3	29.8	28.8	28.6	27.6	26.1	25.1	23.4
80°	20.5	20.3	19.8	19.3	19.0	18.8	18.6	17.6	16.1	15.4	13.9
82.5°	11.2	11.0	11.0	10.7	10.0	10.0	9.8	8.8	8.1	7.6	6.8
85°	3.9	3.9	3.9	3.7	3.7	3.7	3.4	3.2	2.9	2.7	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°	634.6	634.6	634.6	634.6	634.6	634.6	634.6	634.6	634.6	634.6	634.6
2.5°	635.6	635.1	634.9	634.6	634.4	634.1	633.9	633.4	633.2	632.9	632.4
5°	635.6	634.6	634.1	633.4	632.9	632.4	631.7	631.0	630.2	629.5	628.8
7.5°	634.6	633.2	632.2	630.7	630.2	629.5	628.0	627.1	625.8	624.4	622.7
10°	632.2	630.5	628.5	626.6	625.8	624.6	622.7	621.0	619.0	617.1	615.3
12.5°	628.3	625.6	623.2	620.5	619.0	617.8	615.1	612.7	610.2	608.0	605.1
15°	622.4	619.2	616.1	612.4	610.7	609.2	605.3	602.4	598.5	595.6	592.6
17.5°	612.9	608.0	604.1	599.5	597.0	595.3	591.9	587.3	583.6	580.4	577.0
20°	596.5	591.9	586.5	581.4	578.7	576.5	571.7	566.8	563.1	559.7	556.0
22.5°	575.1	569.2	565.3	559.0	556.8	554.1	548.2	543.8	539.7	536.3	532.8
25°	549.0	543.8	538.5	532.6	529.9	526.7	521.9	517.2	514.5	510.6	506.5
27.5°	518.9	514.8	508.2	503.1	500.4	497.9	493.3	489.2	485.2	482.6	478.7
30°	487.2	482.3	476.5	471.1	469.6	466.7	462.5	459.4	455.2	453.5	451.8
32.5°	452.3	446.7	442.3	438.9	435.9	433.5	431.3	426.2	425.4	421.1	420.6
35°	414.2	411.8	407.6	404.7	402.3	400.5	396.9	394.4	391.8	391.0	389.3
37.5°	378.3	375.4	371.5	368.8	367.1	366.9	364.2	362.7	360.8	359.8	357.8
40°	340.7	339.5	336.1	335.6	332.9	332.7	331.2	329.5	327.8	327.8	328.1
42.5°	306.1	304.6	303.2	301.4	300.0	300.0	299.3	298.8	298.3	297.5	298.8
45°	273.6	271.7	270.7	269.0	269.7	268.3	267.8	267.8	267.0	266.8	268.5
47.5°	243.4	241.2	240.2	239.7	239.7	239.9	237.7	238.5	238.2	238.7	239.4
50°	215.8	213.8	212.4	212.4	212.6	211.6	210.6	211.4	210.6	211.1	212.8
52.5°	190.1	188.2	187.5	187.5	186.0	185.8	186.2	185.3	185.5	185.8	186.7
55°	166.5	165.2	164.0	162.8	163.1	162.6	161.6	161.3	161.8	162.1	163.3
57.5°	145.2	143.5	141.8	141.3	140.8	140.8	139.6	139.4	139.9	138.6	138.6
60°	125.0	124.0	121.8	121.1	121.1	119.8	118.9	119.4	118.1	117.9	118.1
62.5°	106.2	105.4	104.0	102.5	102.0	101.5	100.3	99.8	99.3	98.4	96.9
65°	89.8	88.1	86.4	85.4	84.7	83.5	82.7	81.8	80.3	79.8	78.4
67.5°	73.5	71.8	70.1	69.3	68.6	67.9	66.6	65.4	63.7	61.8	60.0
70°	59.1	56.9	55.9	53.9	53.5	52.5	50.8	49.5	47.8	45.6	43.9
72.5°	45.2	43.7	42.2	40.5	39.3	38.6	37.1	35.1	33.2	32.0	30.3
75°	32.5	31.7	29.8	27.8	27.3	26.4	24.7	23.4	22.0	20.0	18.6
77.5°	22.0	20.5	19.3	17.6	17.1	16.1	15.1	13.9	12.9	11.7	10.7
80°	12.9	11.7	11.0	9.8	9.3	8.8	8.1	7.1	6.3	5.9	5.6
82.5°	6.3	5.4	5.1	4.4	4.1	3.9	3.4	3.2	2.7	2.7	2.7
85°	2.2	1.7	1.7	1.5	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°	634.6	634.6	634.6	634.6	634.6	634.6	634.6	634.6	634.6	634.6	634.6
2.5°	632.2	631.9	631.7	631.5	631.5	631.2	631.2	631.0	631.0	630.7	630.7
5°	627.8	627.1	626.6	626.1	626.1	625.4	624.9	624.4	624.1	624.1	623.6
7.5°	621.7	620.7	619.7	619.0	618.8	617.5	616.6	616.6	615.6	615.1	614.6
10°	613.6	611.9	610.5	609.7	608.8	608.0	606.8	606.1	605.3	604.1	603.9
12.5°	602.7	601.4	599.2	598.3	597.8	596.3	594.4	593.4	593.1	592.2	591.4
15°	590.2	587.5	585.6	584.3	584.3	581.9	580.9	579.5	578.5	577.8	577.5
17.5°	574.1	571.4	569.5	567.7	567.3	565.3	563.8	563.4	562.1	562.6	561.4
20°	553.3	551.1	549.7	547.5	547.5	546.3	545.8	544.6	544.1	543.6	544.1
22.5°	531.1	528.4	526.0	525.8	525.8	524.1	523.8	523.6	522.6	523.3	523.1
25°	505.0	503.1	501.6	501.4	501.4	500.4	499.4	499.9	500.6	500.4	501.1
27.5°	477.9	476.0	475.5	475.2	474.7	474.5	475.0	475.0	475.7	476.7	477.7
30°	448.6	448.1	447.4	447.2	446.7	447.9	448.4	449.1	448.9	450.3	451.3
32.5°	419.3	418.4	418.1	418.6	419.3	419.1	420.6	421.1	421.5	423.2	424.0
35°	389.8	389.6	389.1	389.1	389.3	391.3	391.3	393.0	394.0	394.4	396.4
37.5°	358.1	359.1	359.5	360.3	360.5	361.2	361.7	363.4	364.4	365.4	366.4
40°	329.0	328.5	330.7	329.3	329.8	332.0	332.9	332.7	334.2	335.6	336.6
42.5°	298.0	298.8	299.3	299.7	301.0	301.2	302.4	304.1	304.6	306.3	306.8
45°	268.0	268.3	269.2	270.2	270.9	272.9	273.4	274.1	275.6	275.6	276.3
47.5°	239.7	240.7	240.7	242.1	243.4	243.1	244.8	245.3	245.1	246.3	246.8
50°	212.6	214.1	213.8	214.8	215.3	215.5	217.0	217.5	216.5	217.7	218.0
52.5°	186.7	187.5	188.4	188.7	188.2	189.4	188.9	189.9	189.7	190.6	189.7
55°	163.1	162.8	162.8	163.3	162.8	163.3	163.8	162.8	162.1	163.1	162.8
57.5°	139.4	139.4	138.9	139.6	138.9	138.2	137.9	137.2	136.4	136.4	136.2
60°	117.2	116.7	115.7	115.5	115.5	114.2	113.7	112.8	112.8	111.8	110.8
62.5°	96.4	95.2	94.5	94.5	94.0	92.8	90.6	89.1	88.6	87.1	86.9
65°	76.9	75.7	74.9	73.5	72.2	71.8	69.6	67.9	67.1	65.7	65.9
67.5°	59.1	57.1	54.9	53.9	53.2	51.5	50.8	49.5	48.8	48.8	48.8
70°	42.5	40.8	38.6	37.8	37.3	35.9	35.1	34.9	35.6	35.4	35.6
72.5°	28.6	26.8	25.9	25.4	24.9	24.2	24.7	24.9	24.4	24.7	24.9
75°	17.3	16.8	16.1	15.9	15.9	16.1	15.9	15.9	16.1	16.1	16.4
77.5°	10.0	9.5	9.5	9.3	9.8	9.5	9.5	9.5	9.8	9.8	9.8
80°	5.4	5.4	5.4	5.4	5.6	5.4	5.6	5.6	5.6	5.6	5.6
82.5°	2.7	2.7	2.7	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.7
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°	634.6	634.6	634.6	634.6	634.6	634.6	634.6	634.6
2.5°	630.2	630.2	630.2	629.7	630.0	630.0	629.7	629.7
5°	623.4	623.2	622.7	622.7	622.2	622.7	622.4	622.7
7.5°	614.1	614.1	613.4	613.4	613.1	612.9	612.7	612.9
10°	603.1	603.1	602.7	602.4	602.7	601.7	601.7	601.4
12.5°	590.9	590.4	590.0	590.2	590.0	589.2	589.0	589.2
15°	576.8	576.0	576.3	575.6	575.6	575.3	575.8	575.8
17.5°	561.2	560.7	560.2	560.4	559.9	560.2	559.9	559.7
20°	543.8	543.6	543.6	542.6	542.8	542.6	542.8	543.6
22.5°	523.8	523.6	523.8	523.1	523.6	523.6	524.3	524.3
25°	501.8	501.6	502.1	502.3	502.6	503.3	502.6	502.8
27.5°	477.4	478.2	478.9	479.1	480.1	479.4	478.9	479.6
30°	452.8	452.8	452.5	453.5	454.2	455.0	453.8	453.8
32.5°	424.5	425.7	425.7	425.9	426.7	426.7	426.7	427.6
35°	397.4	398.1	398.4	397.4	397.9	397.6	399.3	399.3
37.5°	367.1	367.1	367.4	369.1	369.1	368.3	368.8	368.8
40°	338.3	338.5	337.6	338.1	339.3	338.8	339.3	339.8
42.5°	306.8	308.5	307.5	308.0	307.8	308.0	308.3	308.3
45°	276.8	277.3	277.3	277.5	278.0	278.5	277.0	276.8
47.5°	247.5	247.7	248.5	247.3	248.7	247.3	248.7	247.0
50°	218.0	218.9	218.2	218.7	218.0	218.0	217.7	217.5
52.5°	189.9	189.7	189.7	189.4	189.4	189.9	189.4	190.1
55°	161.8	162.1	161.6	161.3	161.1	161.8	161.1	160.6
57.5°	135.2	135.7	134.7	135.2	133.5	134.2	134.5	134.7
60°	110.6	109.8	109.8	108.9	108.9	109.6	108.6	108.6
62.5°	85.7	86.2	85.4	86.4	86.4	87.4	86.9	87.4
65°	65.7	65.9	66.1	66.1	66.1	67.6	67.1	66.4
67.5°	49.5	49.8	50.0	49.8	50.5	50.0	50.0	50.3
70°	35.9	36.1	36.4	36.4	36.1	36.4	36.4	36.4
72.5°	24.9	25.1	24.9	25.1	25.4	25.1	25.1	25.4
75°	16.4	16.4	16.1	16.1	16.1	16.1	16.4	16.1
77.5°	9.5	9.8	9.5	9.8	9.8	9.8	9.8	9.8
80°	5.6	5.6	5.6	5.4	5.6	5.6	5.6	5.4
82.5°	2.9	2.9	2.7	2.7	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)